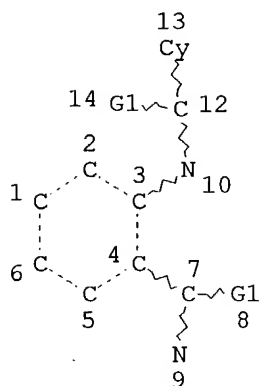


10/698643

(FILE 'REGISTRY' ENTERED AT 14:36:19 ON 12 NOV 2004)

L24 STR



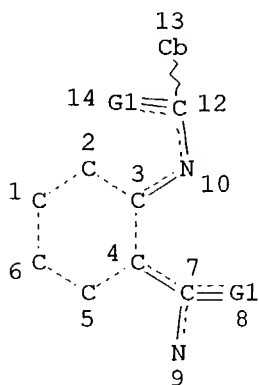
VAR G1=O/S  
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DEFAULT MLEVEL IS ATOM  
DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:  
RSPEC I  
NUMBER OF NODES IS 13

STEREO ATTRIBUTES: NONE

L26 14784 SEA FILE=REGISTRY SSS FUL L24  
L62 STR

← Temp saved 7 days



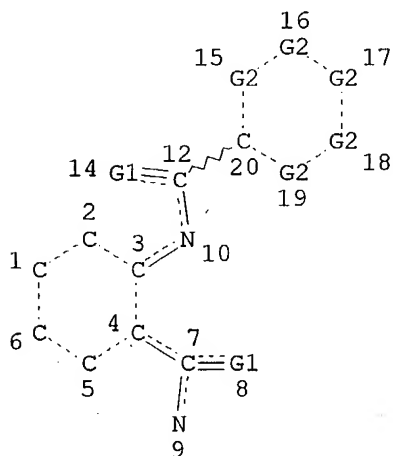
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NSPEC IS RC AT 9  
DEFAULT MLEVEL IS ATOM  
DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:  
RSPEC I  
NUMBER OF NODES IS 13



10/698643

STEREO ATTRIBUTES: NONE  
L64 STR



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VAR G1=O/S
VAR G2=N/O/S/C
NODE ATTRIBUTES:
NSPEC    IS RC          AT    9
DEFAULT MLEVEL IS ATOM
DEFAULT ECLEVEL IS LIMITED
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GRAPH ATTRIBUTES:
RSPEC I
NUMBER OF NODES IS 18
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STEREO ATTRIBUTES: NONE

L65 658 SEA FILE=REGISTRY SUB=L26 SSS FUL (L64

NOT L62) ← Search for six (6)  
member heterocycles only  
658 ANSWERS "j"

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100.0% PROCESSED 14654 ITERATIONS
SEARCH TIME: 00.00.02
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FILE 'CAPLUS' ENTERED AT 14:45:28 ON 12 NOV 2004

L69 58 S L65

L70 22 S L69 NOT (PY=>2000 OR PD=>20000322)

E1 THROUGH E56 ASSIGNED

L70 ANSWER 1 OF 22 CAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER: 1999:699078 CAPLUS

DOCUMENT NUMBER: 131:317778

TITLE: Phosphate derivatives for treatment of nephritis

INVENTOR(S): Miyata, Kazuyoshi; Tsuda, Yoshihiko; Koji, Yasuo;  
Kuroki, Morihisa; Sakai, Yasuhiro; Mukai, Kiyoshi;  
Hashimoto, Kinji; Kori, Hideaki

PATENT ASSIGNEE(S) : Ohtsuka Pharmaceutical Co., Ltd., Japan

SOURCE: Jpn. Kokai Tokkyo Koho, 19 pp.

CODEN: JKXXAF

DOCUMENT TYPE: Patent

LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

Searcher :        Shears        571-272-2528



## PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 11302177	A2	19991102	JP 1998-116645	19980427

PRIORITY APPLN. INFO.: JP 1998-116645 19980427

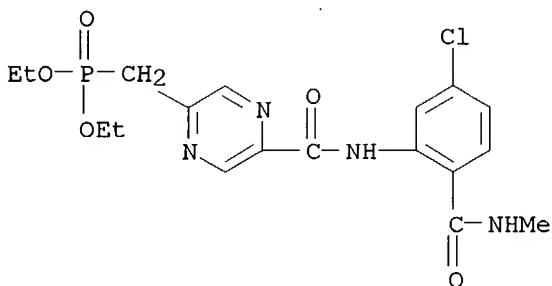
OTHER SOURCE(S): MARPAT 131:317778

AB Phosphate derivs. (Markush's structures given) are claimed for treatment of nephritis. The derivs. inhibited mesangium cell proliferation in vitro. Examples of tablets, capsules, and granules were formulated.

IT **192723-63-0**  
 RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
 (phosphate derivs. for treatment of nephritis)

RN 192723-63-0 CAPLUS

CN Phosphonic acid, [[5-[[[5-chloro-2-[(methylamino)carbonyl]phenyl]amino]carbonyl]pyrazinyl]methyl]-, diethyl ester (9CI) (CA INDEX NAME)



L70 ANSWER 2 OF 22 CAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER: 1999:188605 CAPLUS

DOCUMENT NUMBER: 131:340

TITLE: Reversal of P-glycoprotein mediated multidrug resistance by novel anthranilamide derivatives

AUTHOR(S): Roe, Michael; Folkes, Adrian; Ashworth, Philip; Brumwell, Julie; Chima, Lal; Hunjan, Sukhjot; Pretswell, Ian; Dangerfield, Wendy; Ryder, Hamish; Charlton, Peter

CORPORATE SOURCE: Xenova Ltd., Slough, SL1 4EF, UK

SOURCE: Bioorganic & Medicinal Chemistry Letters (1999), 9(4), 595-600  
 CODEN: BMCLE8; ISSN: 0960-894X

PUBLISHER: Elsevier Science Ltd.

DOCUMENT TYPE: Journal

LANGUAGE: English

AB We have synthesized and evaluated a series of anthranilamide based modulators of P-glycoprotein. These studies have identified XR9576, a potent inhibitor of P-glycoprotein in vitro and in vivo. The general synthesis and the SAR of these compds. are described.

IT **206873-73-6P 206873-74-7P 206873-76-9P**  
**206873-77-0P 206873-78-1P**



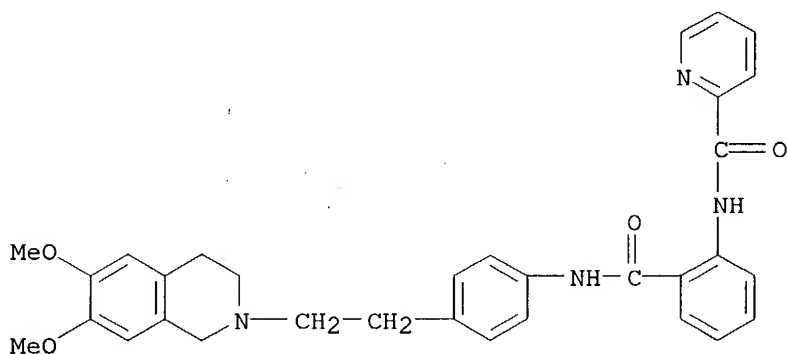
10/698643

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of novel anthranilamide derivs. for reversal of P-glycoprotein mediated multidrug resistance)

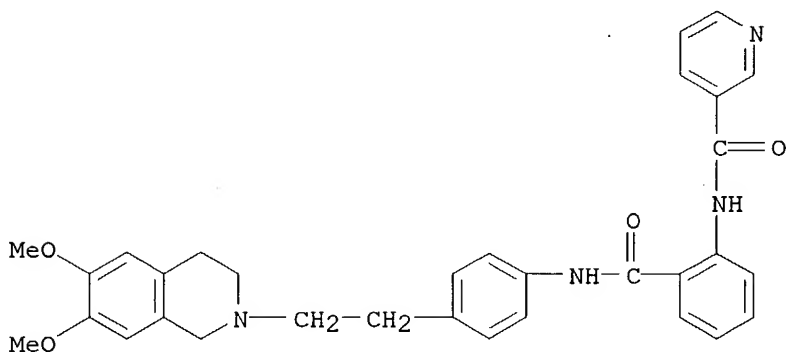
RN 206873-73-6 CAPLUS

CN 2-Pyridinecarboxamide, N-[2-[[[4-[2-(3,4-dihydro-6,7-dimethoxy-2(1H)-isoquinolinyl)ethyl]phenyl]amino]carbonyl]phenyl]- (9CI) (CA INDEX NAME)



RN 206873-74-7 CAPLUS

CN 3-Pyridinecarboxamide, N-[2-[[[4-[2-(3,4-dihydro-6,7-dimethoxy-2(1H)-isoquinolinyl)ethyl]phenyl]amino]carbonyl]phenyl]- (9CI) (CA INDEX NAME)

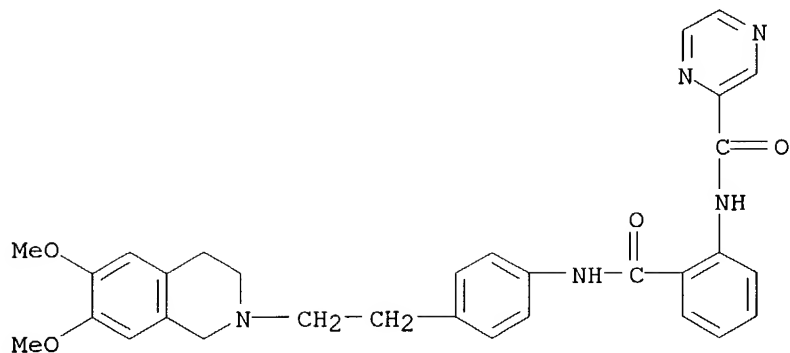


RN 206873-76-9 CAPLUS

CN Pyrazinecarboxamide, N-[2-[[[4-[2-(3,4-dihydro-6,7-dimethoxy-2(1H)-isoquinolinyl)ethyl]phenyl]amino]carbonyl]phenyl]- (9CI) (CA INDEX NAME)

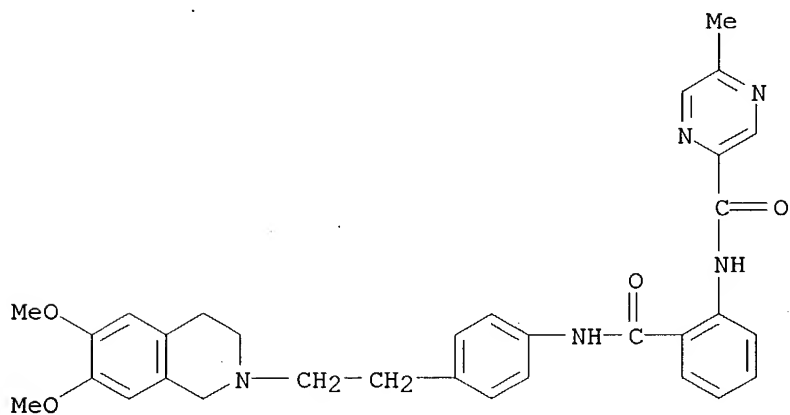


10/698643



RN 206873-77-0 CAPLUS

CN Pyrazinecarboxamide, N-[2-[[[4-[2-(3,4-dihydro-6,7-dimethoxy-2(1H)-isoquinolinyl)ethyl]phenyl]amino]carbonyl]phenyl]-5-methyl- (9CI) (CA INDEX NAME)

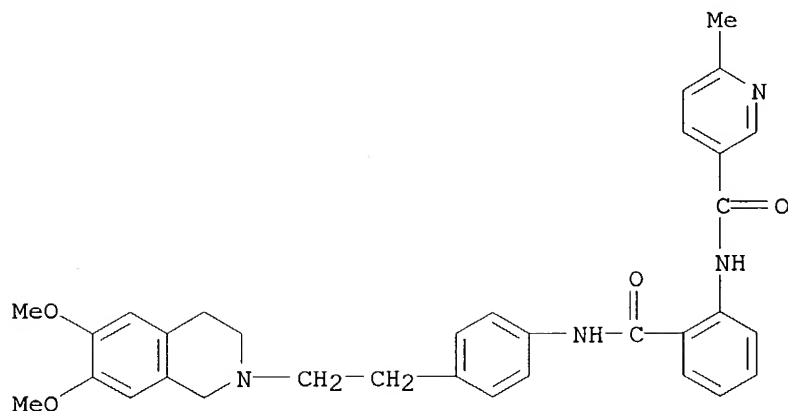


RN 206873-78-1 CAPLUS

CN 3-Pyridinecarboxamide, N-[2-[[[4-[2-(3,4-dihydro-6,7-dimethoxy-2(1H)-isoquinolinyl)ethyl]phenyl]amino]carbonyl]phenyl]-6-methyl- (9CI) (CA INDEX NAME)



10/698643

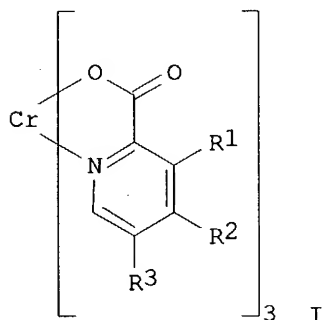


REFERENCE COUNT: 12 THERE ARE 12 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L70 ANSWER 3 OF 22 CAPLUS COPYRIGHT 2004 ACS on STN  
 ACCESSION NUMBER: 1998:724208 CAPLUS  
 DOCUMENT NUMBER: 130:33033  
 TITLE: Chromium picolinate complexes and pharmaceuticals with hypoglycemic or insulin-lowering effect  
 INVENTOR(S): Kuroki, Yasuhisa  
 PATENT ASSIGNEE(S): Otsuka Pharmaceutical Co., Ltd., Japan  
 SOURCE: Jpn. Kokai Tokkyo Koho, 8 pp.  
 CODEN: JKXXAF  
 DOCUMENT TYPE: Patent  
 LANGUAGE: Japanese  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 10298189	A2	19981110	JP 1997-112682	19970430
PRIORITY APPLN. INFO.:			JP 1997-112682	19970430
OTHER SOURCE(S):	MARPAT	130:33033		

GI



Searcher : Shears 571-272-2528



AB Hypoglycemic agents, their compns., or insulin-lowering compns. contain Cr complexes I [R1-R3 = H, lower alkyl, OH, benzoyl, lower alkoxy carbonyl, halo-substituted 3-(lower alkyl)-4(3H)-quinazolin-2-yl; R1 = R2 = R3 ≠ H] and optional carriers. 3-Hydroxypicolinic acid (4.17 g) was treated with 2.66 g CrCl<sub>3</sub>·6H<sub>2</sub>O in H<sub>2</sub>O at 80° for 5 h to give 1.67 g trans-I.1/2H<sub>2</sub>O (R1 = OH, R2 = R3 = H), which was orally administered to dexamethasone-treated rats to show 5% decrease of blood glucose (at 10 mg/kg dose) and 25% decrease of blood insulin (at 100 mg/kg dose). Formulation examples are given.

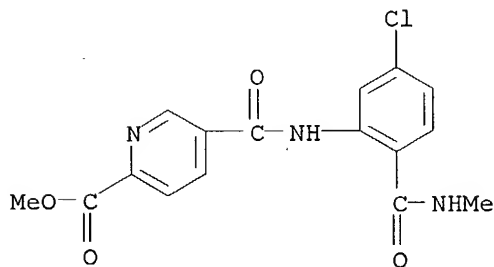
IT 216656-75-6P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(preparation of chromium picolinate complexes as hypoglycemic or insulin-lowering agents)

RN 216656-75-6 CAPLUS

CN 2-Pyridinecarboxylic acid, 5-[[[5-chloro-2-[(methylamino)carbonyl]phenyl]amino]carbonyl]-, methyl ester (9CI) (CA INDEX NAME)



L70 ANSWER 4 OF 22 CAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER: 1998:606819 CAPLUS

DOCUMENT NUMBER: 129:297543

TITLE: Synthesis and structure of chiral 2,6-bis[(2-carbamoylphenyl)carbamoyl]pyridine ligands

AUTHOR(S): Yu, Qiang; Baroni, Timothy E.; Liable-Sands, Louise; Rheingold, Arnold L.; Borovik, A. S.

CORPORATE SOURCE: Department of Chemistry, University of Kansas, Lawrence, KS, 66045, USA

SOURCE: Tetrahedron Letters (1998), 39(38), 6831-6834  
CODEN: TELEAY; ISSN: 0040-4039

PUBLISHER: Elsevier Science Ltd.

DOCUMENT TYPE: Journal

LANGUAGE: English

AB The synthesis and structure of enantiomerically pure 2,6-bis[(2-carbamoylphenyl)carbamoyl]pyridine ligands are described. Appended from the aryl groups are optically active groups which provide a chiral environment around the planar pyridine core. NMR and x-ray diffraction studies show that these ligands contain helical character which is maintained by a network of intramol. H bonds. These ligands can bind metal ions through their tridentate diamidato-pyridyl chelate to form optically active metal complexes. A Ni complex is prepared and its x-ray crystal structure is determined. The modular design of these ligands offers

a



10/698643

variety of chiral environments about the metal chelate that can be useful in the synthesis of metal reagents for asym. transformations.

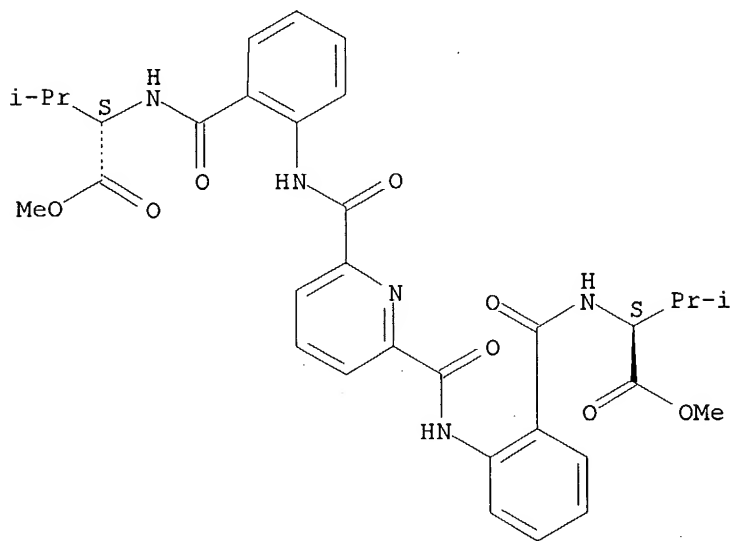
IT 214203-39-1P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)  
(preparation and complexation with nickel)

RN 214203-39-1 CAPLUS

CN L-Valine, N,N'-[2,6-pyridinediylbis(carbonylimino-2,1-phenylenecarbonyl)]bis-, dimethyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.



IT 214203-41-5P

RL: PRP (Properties); SPN (Synthetic preparation); PREP (Preparation)  
(preparation and crystal structure of)

RN 214203-41-5 CAPLUS

CN L-Alanine, N,N'-[2,6-pyridinediylbis(carbonylimino-2,1-phenylenecarbonyl)]bis-, dimethyl ester, compd. with dichloromethane (1:1) (9CI) (CA INDEX NAME)

CM 1

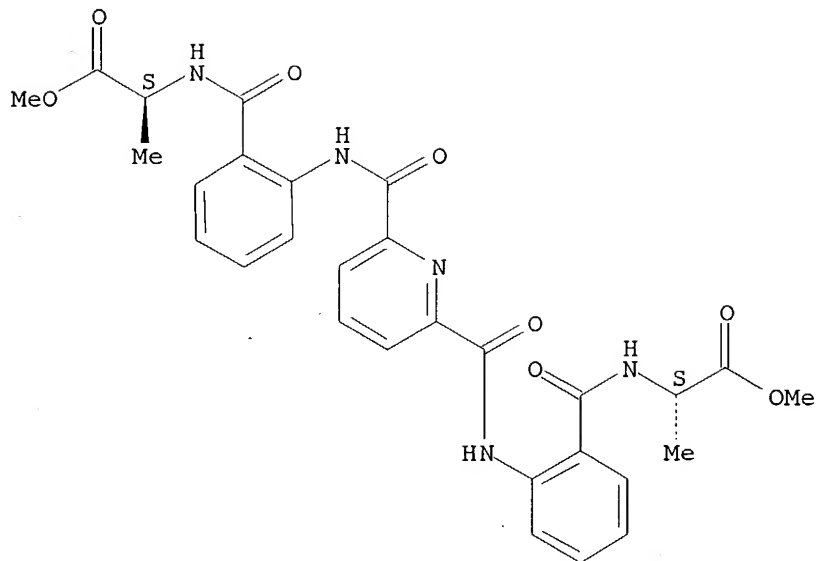
CRN 214203-38-0

CMF C29 H29 N5 O8

Absolute stereochemistry.



10/698643



CM 2

CRN 75-09-2  
CMF C H2 Cl2

Cl-CH<sub>2</sub>-Cl

IT 214203-38-0P

RL: PRP (Properties); SPN (Synthetic preparation); PREP (Preparation)  
(preparation and mol. structure of)

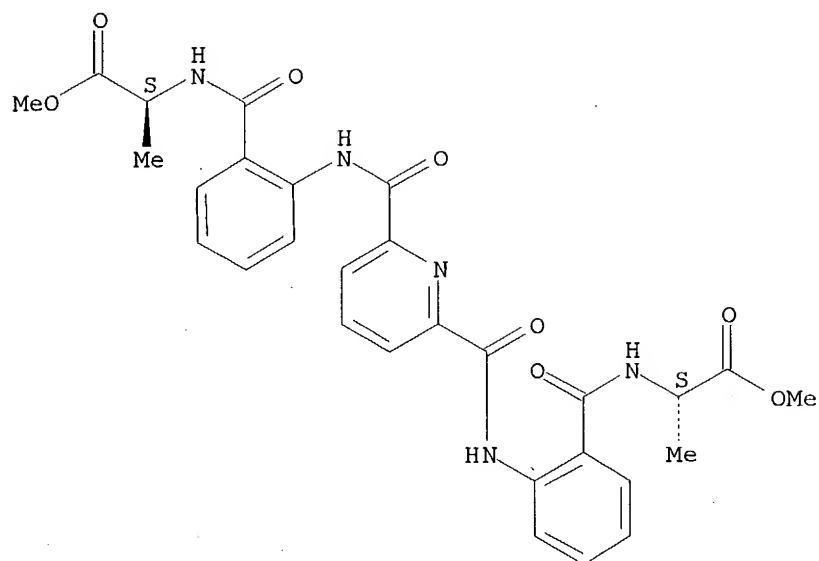
RN 214203-38-0 CAPLUS

CN L-Alanine, N,N'-[2,6-pyridinediylbis(carbonylimino-2,1-phenylenecarbonyl)]bis-, dimethyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.



10/698643



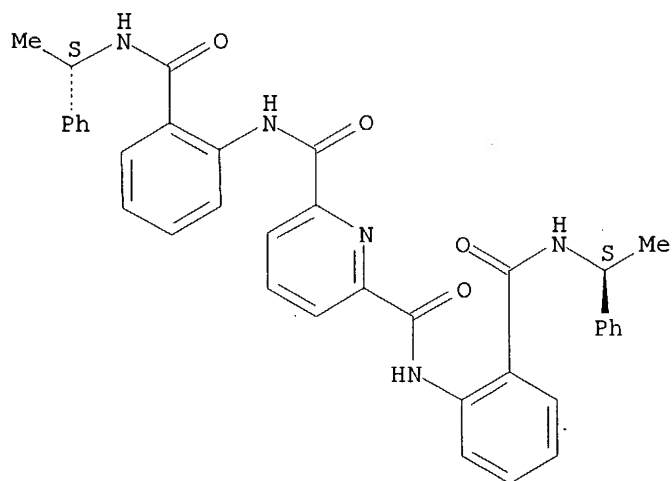
IT 214203-40-4P

RL: SPN (Synthetic preparation); PREP (Preparation)  
(preparation of)

RN 214203-40-4 CAPLUS

CN 2,6-Pyridinedicarboxamide, N,N'-bis[2-[[[(1S)-1-phenylethyl]amino]carbonyl]phenyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



REFERENCE COUNT: 21 THERE ARE 21 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

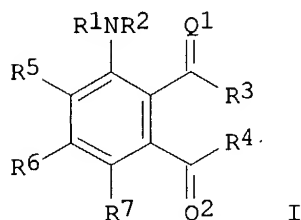
L70 ANSWER 5 OF 22 CAPLUS COPYRIGHT 2004 ACS on STN  
ACCESSION NUMBER: 1998:13933 CAPLUS

Searcher : Shears 571-272-2528



DOCUMENT NUMBER: 128:75193  
 TITLE: Preparation of aminophthalic acid derivatives as pesticides.  
 INVENTOR(S): Elbe, Hans-Ludwig; Dutzmann, Stefan; Stenzel, Klaus  
 PATENT ASSIGNEE(S): Bayer Aktiengesellschaft, Germany  
 SOURCE: PCT Int. Appl., 110 pp.  
 CODEN: PIXXD2  
 DOCUMENT TYPE: Patent  
 LANGUAGE: German  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9747589	A1	19971218	WO 1997-EP2845	19970602
W: AU, BB, BG, BR, BY, CA, CN, CZ, HU, IL, JP, KR, KZ, LK, MX, NO, NZ, PL, RO, RU, SK, TR, UA, US				
RW: AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG				
DE 19623744	A1	19971218	DE 1996-19623744	19960614
AU 9730936	A1	19980107	AU 1997-30936	19970602
PRIORITY APPLN. INFO.:			DE 1996-19623744	19960614
			WO 1997-EP2845	19970602
OTHER SOURCE(S):		MARPAT 128:75193		
GI				



AB Use of title compds. [I; Q1, Q2 = O, S; R1 = H, R11CO; R2 = R8R9NCO, R10OCO, R11CO, R12SO2; R8 = H, alkyl, cycloalkyl, (substituted) aryl, heteroaryl; R9 = H, alkyl; R8R9N = (substituted) heterocyclyl; R10 = (substituted) alkyl, alkenyl, alkynyl, cycloalkyl, heterocyclyl; R11 = H, (substituted) alkyl, alkenyl, alkynyl, cycloalkyl, cycloalkenyl, aryl, aralkyl, heterocyclyl; R12 = alkyl, aryl, heterocyclyl; R1R2 = CR13R14; R1R2N = (substituted) heterocyclyl; R13 = H, alkyl, alkenyl, cycloalkyl, (substituted) aryl, heterocyclyl; R14 = H, alkyl, alkenyl, cycloalkyl, cycloalkenyl, aryl, heterocyclyl, alkoxy, dialkylamino; R13R14 = cycloalkylidene; R3, R4 = OH, alkoxy, alkenyloxy, alkynyloxy, aralkoxy, cycloalkoxy, cycloalkenyloxy, aryloxy, heterocycliloxy, aralkylthio, SH, arylthio, amino, etc.; R5-R7 = H, halo, cyano, NO2, alkyl, alkoxy, alkylthio, haloalkyl, haloalkoxy, haloalkylthio] for combating pests is claimed. Thus, 3-nitrophthalic anhydride was heated with BuOH to give 88.1% 3-nitrophthalic acid 2-Bu ester. The latter was refluxed with DMF di-Me acetal in PhMe to give 92% 3-nitrophthalic acid 1-Me ester 2-Bu



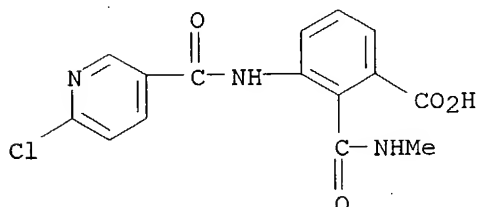
ester. This in H<sub>2</sub>O/THF was treated with Zn and HCl to give 82.4% 3-aminophthalic acid 1-Me ester 2-Bu ester. I at 100 ppm gave 82-98% control of Botrytis cinerea on beans.

IT **200709-28-0P**

RL: AGR (Agricultural use); BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation); USES (Uses) (preparation of aminophthalic acid derivs. as pesticides)

RN 200709-28-0 CAPLUS

CN Benzoic acid, 3-[[ (6-chloro-3-pyridinyl)carbonyl]amino]-2-[(methylamino)carbonyl]- (9CI) (CA INDEX NAME)



L70 ANSWER 6 OF 22 CAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER: 1997:667205 CAPLUS

DOCUMENT NUMBER: 127:262339

TITLE: Novel Folding Patterns in a Family of Oligoanthranilamides: Non-Peptide Oligomers That Form Extended Helical Secondary Structures

AUTHOR(S): Hamuro, Yoshitomo; Geib, Steven J.; Hamilton, Andrew D.

CORPORATE SOURCE: Department of Chemistry, University of Pittsburgh, Pittsburgh, PA, 15260, USA

SOURCE: Journal of the American Chemical Society (1997), 119(44), 10587-10593

CODEN: JACSAT; ISSN: 0002-7863

PUBLISHER: American Chemical Society

DOCUMENT TYPE: Journal

LANGUAGE: English

AB Anthranilamide derivs. are used as the basis for a series of novel oligomers that fold into helical secondary structures in the solid state. When combined with pyridine-2,6-dicarboxylic acid and 4,6-dimethoxy-1,3-diaminobenzene subunits, oligoanthranilamides can be induced to take up a coiled conformation corresponding to two turns of a helix. X-ray crystallog. show that intramol. hydrogen bonding and  $\pi$ - $\pi$  stacking interactions are important in stabilizing the extended helical structures. Furthermore, both exptl. and calculated <sup>1</sup>H NMR methods indicate that related conformations are taken up by the oligomers in chloroform solution

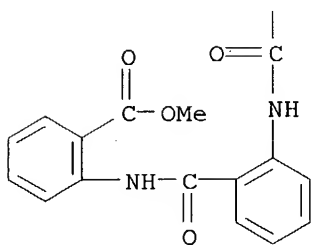
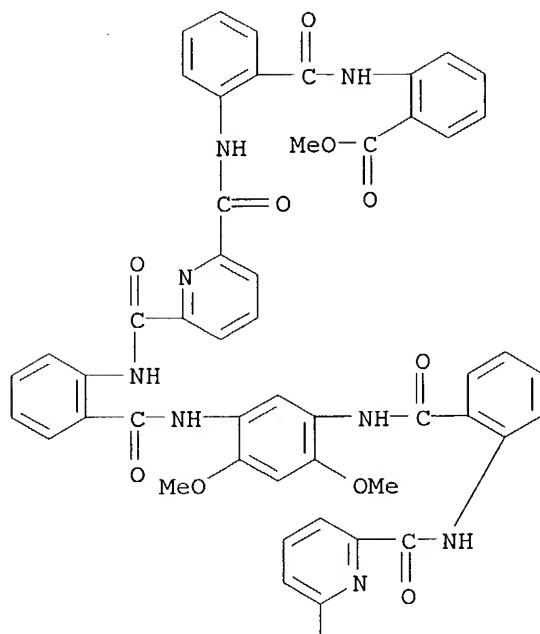
IT **196312-02-4P 196312-04-6P**

RL: PRP (Properties); SPN (Synthetic preparation); PREP (Preparation) (crystallog.; helical conformation of oligoanthranilamides)

RN 196312-02-4 CAPLUS

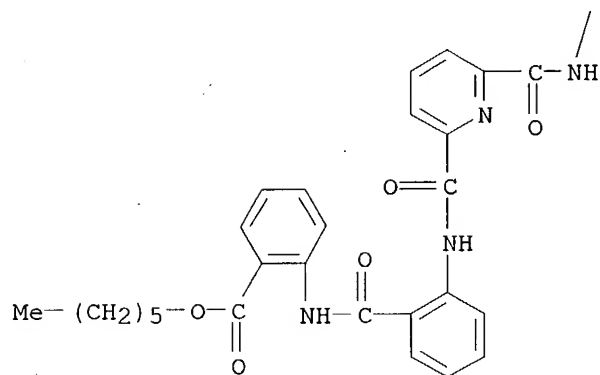
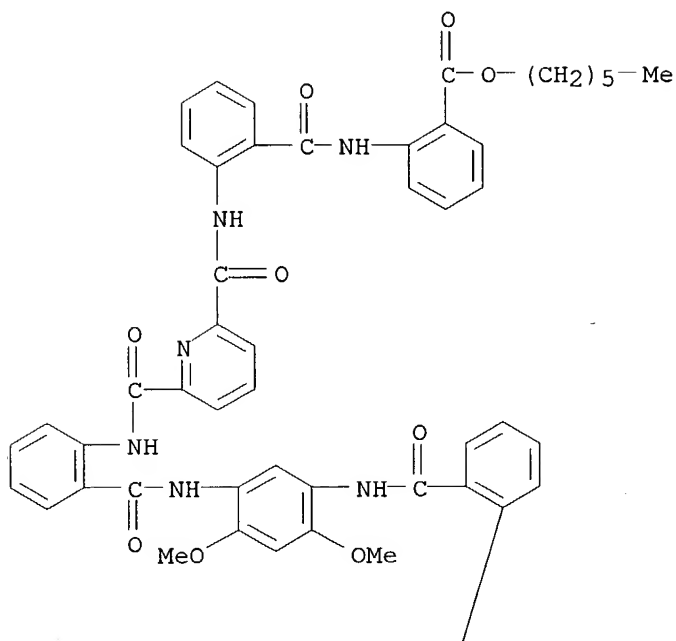
CN Benzoic acid, 2,2'-[(4,6-dimethoxy-1,3-phenylene)bis(iminocarbonyl-2,1-phenyleneiminocarbonyl-6,2-pyridinediylcarbonylimino-2,1-phenylenecarbonylimino)]bis-, dimethyl ester (9CI) (CA INDEX NAME)





RN 196312-04-6 CAPLUS  
 CN Benzoic acid, 2,2'-[(4,6-dimethoxy-1,3-phenylene)bis(iminocarbonyl-2,1-phenyleneiminocarbonyl-6,2-pyridinediylcarbonylimino-2,1-phenylenecarbonylimino)]bis-, dihexyl ester (9CI) (CA INDEX NAME)





IT 155138-99-1

RL: PRP (Properties)

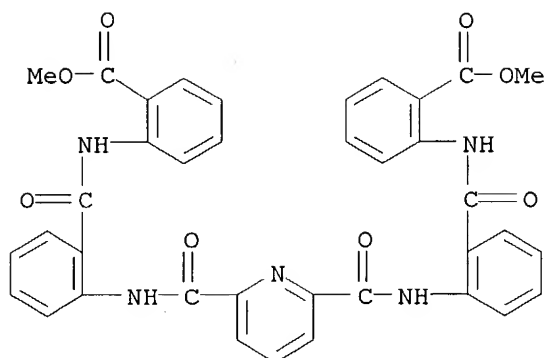
(helical conformation of oligoanthranilamides)

RN 155138-99-1 CAPLUS

CN Benzoic acid, 2,2'-[2,6-pyridinediylbis(carbonylimino-2,1-phenylenecarbonylimino)]bis-, dimethyl ester (9CI) (CA INDEX NAME)



10/698643



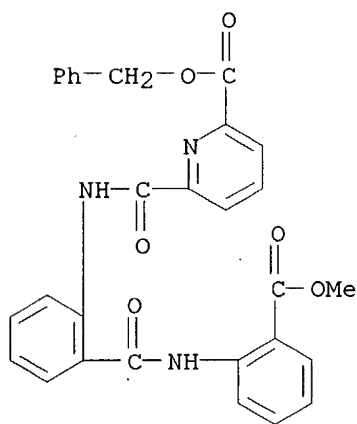
IT 196311-73-6P 196311-77-0P 196311-92-9P  
196311-95-2P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT  
(Reactant or reagent)

(intermediate; preparation of oligoanthranilamides)

RN 196311-73-6 CAPLUS

CN 2-Pyridinecarboxylic acid, 6-[[[2-[[[2-(methoxycarbonyl)phenyl]amino]carbonyl]phenyl]amino]carbonyl]-, phenylmethyl ester (9CI) (CA INDEX NAME)

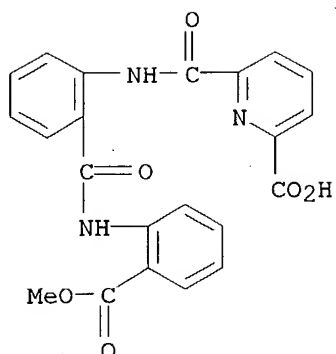


RN 196311-77-0 CAPLUS

CN 2-Pyridinecarboxylic acid, 6-[[[2-[[[2-(methoxycarbonyl)phenyl]amino]carbonyl]phenyl]amino]carbonyl]- (9CI) (CA INDEX NAME)

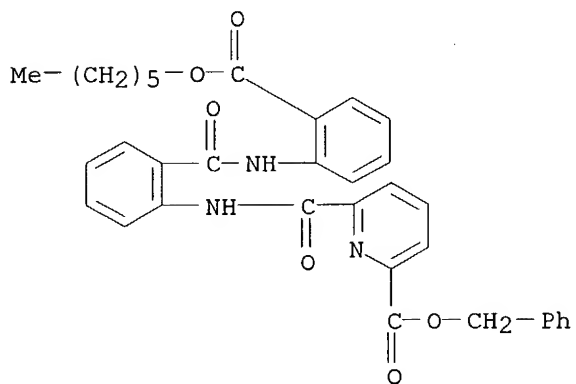


10/698643



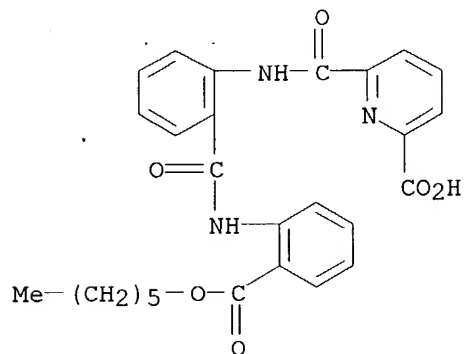
RN 196311-92-9 CAPLUS

CN 2-Pyridinecarboxylic acid, 6-[[[2-[[[2-[(hexyloxy)carbonyl]phenyl]amino]carbonyl]phenyl]amino]carbonyl]-, phenylmethyl ester (9CI) (CA INDEX NAME)



RN 196311-95-2 CAPLUS

CN 2-Pyridinecarboxylic acid, 6-[[[2-[[[2-[(hexyloxy)carbonyl]phenyl]amino]carbonyl]phenyl]amino]carbonyl]- (9CI) (CA INDEX NAME)





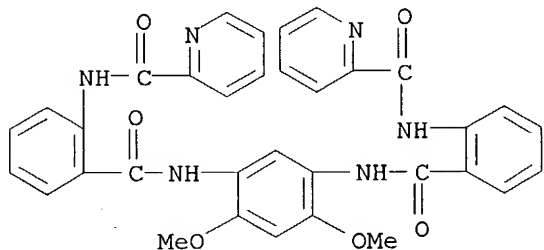
10/698643

IT 196312-07-9P

RL: PRP (Properties); SPN (Synthetic preparation); PREP (Preparation)  
(model; helical conformation of oligoanthranilamides)

RN 196312-07-9 CAPLUS

CN 2-Pyridinecarboxamide, N,N'-[(4,6-dimethoxy-1,3-phenylene)bis(iminocarbonyl-2,1-phenylene)]bis- (9CI) (CA INDEX NAME)



L70 ANSWER 7 OF 22 CAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER: 1996:446492 CAPLUS

DOCUMENT NUMBER: 125:167496

TITLE: Oligoanthranilamides. Non-Peptide Subunits That Show Formation of Specific Secondary Structure

AUTHOR(S): Hamuro, Yoshitomo; Geib, Steven J.; Hamilton, Andrew D.

CORPORATE SOURCE: Department of Chemistry, University of Pittsburgh, Pittsburgh, PA, 15260, USA

SOURCE: Journal of the American Chemical Society (1996), 118(32), 7529-7541

CODEN: JACSAT; ISSN: 0002-7863

PUBLISHER: American Chemical Society

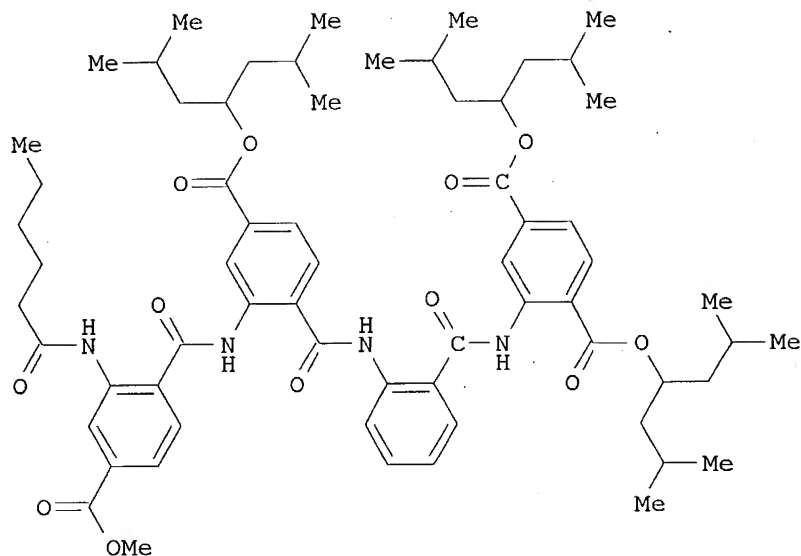
DOCUMENT TYPE: Journal

LANGUAGE: English

GI



10/698643



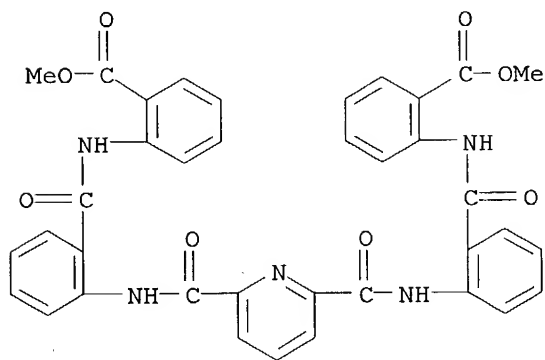
AB A family of novel oligomers based on the anthranilamide nucleus has been prepared and shown to form well-defined secondary structural features. H NMR and X-ray crystallog. techniques have demonstrated that intramol. hydrogen bonds play a key role in stabilizing both linear sheet and helical conformational forms. An example compound is the oligomeric anthranilamide I.

IT 155138-99-1P 155139-01-8P 180133-05-5P  
180133-06-6P

RL: PRP (Properties); SPN (Synthetic preparation); PREP (Preparation)  
(preparation and secondary structure determination of oligomeric anthranilamides)

RN 155138-99-1 CAPLUS

CN Benzoic acid, 2,2'-[2,6-pyridinediylbis(carbonylimino-2,1-phenylenecarbonylimino)]bis-, dimethyl ester (9CI) (CA INDEX NAME)



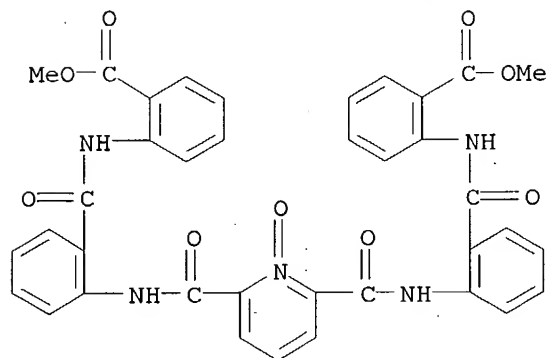
RN 155139-01-8 CAPLUS

CN Benzoic acid, 2,2'-[(1-oxido-2,6-pyridinediyl)bis(carbonylimino-2,1-



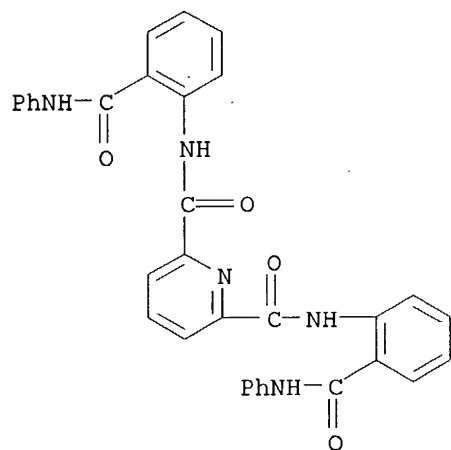
10/698643

phenylenecarbonylimino)]bis-, dimethyl ester (9CI) (CA INDEX NAME)



RN 180133-05-5 CAPLUS

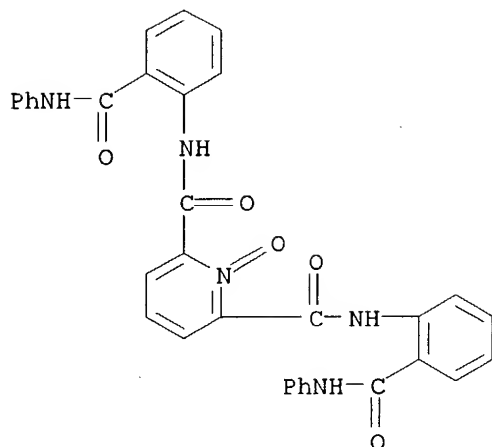
CN 2,6-Pyridinedicarboxamide, N,N'-bis[2-[(phenylamino)carbonyl]phenyl]-  
(9CI) (CA INDEX NAME)



RN 180133-06-6 CAPLUS

CN 2,6-Pyridinedicarboxamide, N,N'-bis[2-[(phenylamino)carbonyl]phenyl]-,  
1-oxide (9CI) (CA INDEX NAME)





L70 ANSWER 8 OF 22 CAPLUS COPYRIGHT 2004 ACS on STN  
 ACCESSION NUMBER: 1995:995215 CAPLUS  
 DOCUMENT NUMBER: 124:117098  
 TITLE: Preparation of pyridylanilide derivatives as fungicides  
 INVENTOR(S): Riordan, Peter Dominic; Boddy, Ian Kenneth; Osbourn, Susan Elisabeth  
 PATENT ASSIGNEE(S): Agrevo UK Ltd., UK  
 SOURCE: PCT Int. Appl., 35 pp.  
 CODEN: PIXXD2  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9525723	A1	19950928	WO 1995-GB570	19950316
W: AU, BG, BR, CA, CN, CZ, FI, HU, JP, KR, KZ, MX, NO, NZ, PL, RO, RU, SD, SK, UA, US				
RW: KE, MW, SD, SZ, UG, AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG				
AU 9518981	A1	19951009	AU 1995-18981	19950316
AU 688473	B2	19980312		
EP 750611	A1	19970102	EP 1995-911403	19950316
EP 750611	B1	19980708		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LI, LU, NL, PT, SE				
CN 1143954	A	19970226	CN 1995-192131	19950316
HU 74778	A2	19970228	HU 1996-2547	19950316
HU 214292	B	19980302		
BR 9507105	A	19970909	BR 1995-7105	19950316
JP 09510471	T2	19971021	JP 1995-524455	19950316
AT 168099	E	19980715	AT 1995-911403	19950316
ZA 9502205	A	19951031	ZA 1995-2205	19950317
US 5756524	A	19980526	US 1996-714149	19960918



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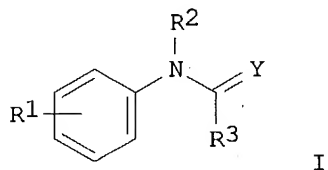
PRIORITY APPLN. INFO.:

GB 1994-5347  
WO 1995-GB570

19940318  
19950316

OTHER SOURCE(S):  
GI

MARPAT 124:117098



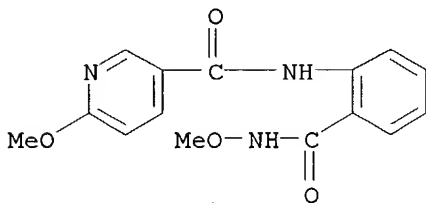
AB Title compds. I [X = O, S; R1, R2 = H, alkyl, cycloalkyl, alkenyl, etc.; R3 = (substituted) pyridyl, pyrimidinyl, pyrazinyl, etc.] were prepared  
Condensation of 6-methoxynicotinoyl chloride with Me anthranilate in the  
presence of Et3N in THF afforded I (X = O; R1 = R2 = H; R3 =  
6-methoxy-3-pyridyl) which showed activity against barley powdery mildew,  
rice blast and apple scab at  $\leq 500$  ppm.

IT 173055-91-9P 173056-05-8P 173056-17-2P  
173056-21-8P 173056-46-7P 173056-75-2P  
173056-88-7P 173056-95-6P 173056-96-7P  
173056-97-8P 173057-04-0P 173057-19-7P

RL: AGR (Agricultural use); BAC (Biological activity or effector, except  
adverse); BSU (Biological study, unclassified); SPN (Synthetic  
preparation); BIOL (Biological study); PREP (Preparation); USES (Uses)  
(preparation of anilide derivs. as fungicides)

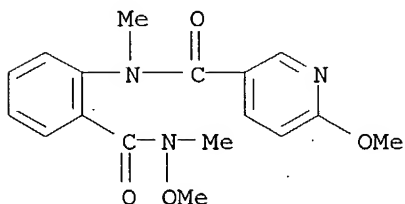
RN 173055-91-9 CAPLUS

CN 3-Pyridinecarboxamide, 6-methoxy-N-[2-[(methoxyamino)carbonyl]phenyl]-  
(9CI) (CA INDEX NAME)



RN 173056-05-8 CAPLUS

CN 3-Pyridinecarboxamide, 6-methoxy-N-[2-[(methoxymethylamino)carbonyl]phenyl]-  
]-N-methyl- (9CI) (CA INDEX NAME)



Searcher :

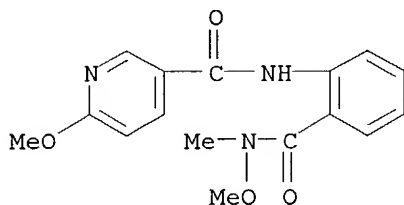
Shears

571-272-2528

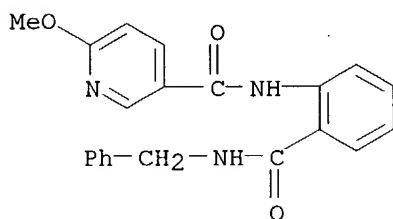


10/698643

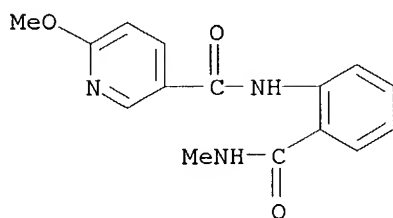
RN 173056-17-2 CAPLUS  
CN 3-Pyridinecarboxamide, 6-methoxy-N-[2-[(methoxymethylamino)carbonyl]phenyl]- (9CI) (CA INDEX NAME)



RN 173056-21-8 CAPLUS  
CN 3-Pyridinecarboxamide, 6-methoxy-N-[2-[(phenylmethyl)amino]carbonyl]phenyl]- (9CI) (CA INDEX NAME)



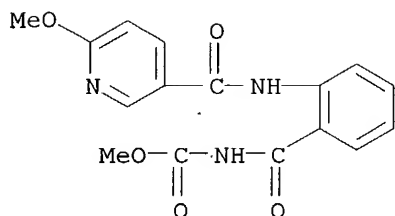
RN 173056-46-7 CAPLUS  
CN 3-Pyridinecarboxamide, 6-methoxy-N-[2-[(methylamino)carbonyl]phenyl]- (9CI) (CA INDEX NAME)



RN 173056-75-2 CAPLUS  
CN Carbamic acid, [2-[[[(6-methoxy-3-pyridinyl)carbonyl]amino]benzoyl]-, methyl ester (9CI) (CA INDEX NAME)

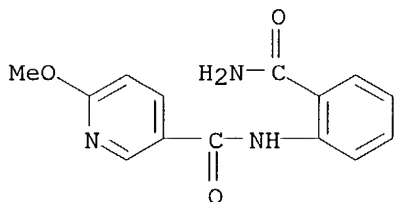


10/698643



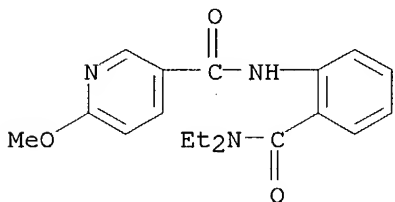
RN 173056-88-7 CAPLUS

CN 3-Pyridinecarboxamide, N-[2-(aminocarbonyl)phenyl]-6-methoxy- (9CI) (CA INDEX NAME)



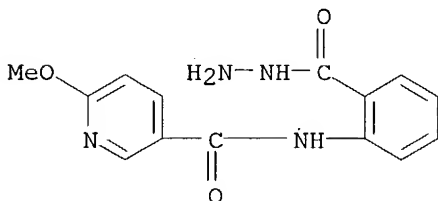
RN 173056-95-6 CAPLUS

CN 3-Pyridinecarboxamide, N-[2-[(diethylamino)carbonyl]phenyl]-6-methoxy- (9CI) (CA INDEX NAME)



RN 173056-96-7 CAPLUS

CN Benzoic acid, 2-[[[(6-methoxy-3-pyridinyl)carbonyl]amino]-, hydrazide (9CI) (CA INDEX NAME)

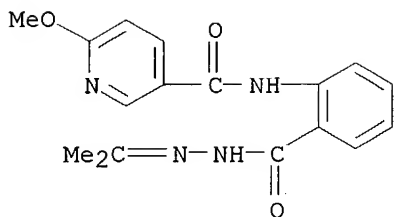


RN 173056-97-8 CAPLUS

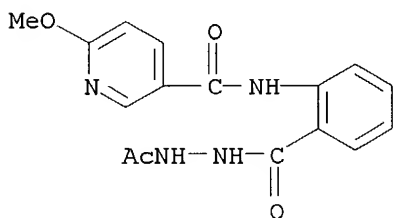
CN Benzoic acid, 2-[[[(6-methoxy-3-pyridinyl)carbonyl]amino]-, (1-methylethylidene)hydrazide (9CI) (CA INDEX NAME)



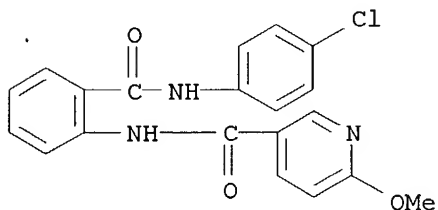
10/698643



RN 173057-04-0 CAPLUS  
CN Benzoic acid, 2-[[[(6-methoxy-3-pyridinyl)carbonyl]amino]-, 2-acetylhydrazide (9CI) (CA INDEX NAME)



RN 173057-19-7 CAPLUS  
CN 3-Pyridinecarboxamide, N-[2-[[[(4-chlorophenyl)amino]carbonyl]phenyl]-6-methoxy- (9CI) (CA INDEX NAME)



L70 ANSWER 9 OF 22 CAPLUS COPYRIGHT 2004 ACS on STN  
ACCESSION NUMBER: 1995:915317 CAPLUS  
DOCUMENT NUMBER: 124:145557  
TITLE: Structure-based design of achiral anthranilamides as P2/P2' surrogates for symmetry-based HIV protease inhibitors: design, synthesis, x-ray structure, enzyme inhibition and antiviral activity  
AUTHOR(S): Randad, Ramnarayan S.; Lubkowska, Lucyna; Bujacz, Anna; Naik, Rajan H.; Gulnik, Sergei V.; Yu, Betty; Silva, Abelardo; Munshi, Sanjeev; Lynch, Tracy M.; et al.  
CORPORATE SOURCE: Structural Biochem. Program, Natl. Cancer Inst.-Frederick Cancer Res. Development Center, Frederick, MD, 21702, USA

Searcher : Shears 571-272-2528



SOURCE: Bioorganic & Medicinal Chemistry Letters (1995),  
5(21), 2557-62  
CODEN: BMCLE8; ISSN: 0960-894X

PUBLISHER: Elsevier

DOCUMENT TYPE: Journal

LANGUAGE: English

AB Guided by the structure of HIV PR complexed with 2S,3R,4S,5S-2,5-bis[N,N'-((3-hydroxy-2-methylphenyl)carbonyl)amino]-3,4-dihydroxy-1,6-diphenylhexane, a novel, achiral, non-peptidic anthranil (Ant) group was designed as a P2/P2' ligand. Symmetry-based inhibitors containing N-(2-pyridinylmethoxycarbonyl)anthranil group are potent antiviral agents.

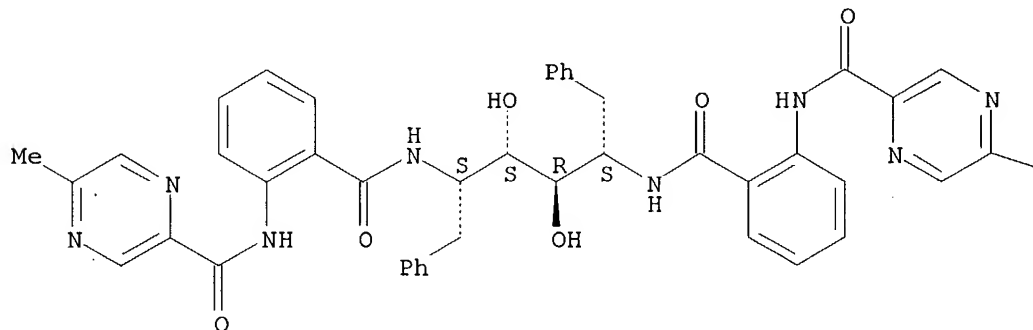
IT **173094-25-2**  
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
(structure-based design of achiral anthranilamides as P2/P2' surrogates for symmetry-based HIV protease inhibitors)

RN 173094-25-2 CAPLUS

CN L-Altritol, 1,2,5,6-tetradeoxy-2,5-bis[[2-[[[(5-methylpyrazinyl)carbonyl]amino]benzoyl]amino]-1,6-diphenyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A



PAGE 1-B

Me

L70 ANSWER 10 OF 22 CAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER: 1995:858623 CAPLUS

DOCUMENT NUMBER: 123:256357

TITLE: Preparation of anthranilic acid amide derivative as cyclic guanosine monophosphate-phosphodiesterase



INHIBITORS  
 INVENTOR(S): Ozaki, Fumihiko; Ishibashi, Keiji; Ikuta, Hironori;  
 Ishihara, Hiroki; Souda, Shigeru  
 PATENT ASSIGNEE(S): Japan  
 SOURCE: PCT Int. Appl., 204 pp.  
 CODEN: PIXXD2  
 DOCUMENT TYPE: Patent  
 LANGUAGE: Japanese  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9518097	A1	19950706	WO 1994-JP2262	19941227
W: AU, CA, CN, FI, HU, KR, NO, NZ, RU, US				
RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
CA 2155662	AA	19950706	CA 1994-2155662	19941227
AU 9512824	A1	19950717	AU 1995-12824	19941227
AU 694465	B2	19980723		
EP 686625	A1	19951213	EP 1995-903999	19941227
EP 686625	B1	19990526		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LI, LU, MC, NL, PT, SE				
CN 1118595	A	19960313	CN 1994-191311	19941227
JP 08188563	A2	19960723	JP 1994-336920	19941227
HU 74450	A2	19961230	HU 1995-2512	19941227
RU 2128644	C1	19990410	RU 1995-120194	19941227
AT 180468	E	19990615	AT 1995-903999	19941227
FI 9503968	A	19951019	FI 1995-3968	19950823
NO 9503305	A	19951025	NO 1995-3305	19950823
US 5716993	A	19980210	US 1995-507476	19950914
PRIORITY APPLN. INFO.:			JP 1993-347092	A 19931227
			JP 1994-299110	A 19941109
			WO 1994-JP2262	W 19941227
OTHER SOURCE(S):	MARPAT 123:256357			
GI				

\* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT \*

AB Anthranilamide derivs. [I; R1, R2, R3, R4 = H, halo, OH, (halo)alkyl, (halo)alkoxy, nitro, hydroxyalkyl, cyano, (CH2)pNR9R10, S(O)qR13, (un)protected CO2H, (un)substituted tetrazolyl, CONH2, pyrazolyl, or imidazolyl; or adjacent two substituents selected from R1 - R4 together with the C atoms bonded to them forms a ring; wherein R9, R10 = H, (halo)alkyl, arylalkyl, heteroarylalkyl, acyl, (un)protected CO2H; or NR9R10 forms a ring; p = 0, 1-6; R13 = H, (halo)alkyl; q = 0, 1-2; R5, R6 = H, halo, OH, cyano, (halo)alkyl, (halo)alkoxy; or R5 and R6 together with the C atoms bonded to them form cycloalkane, oxolane, 1,3-dioxolane, or 1,4-dioxane ring; W = N, CH; R7, R8 = H, (halo)alkyl; or R1 and R7 together with the C atoms bonded to them form a ring optionally containing other N, O, or S atom; A = H, (halo)alkyl, X(CH2)mZ; wherein X = CO, CS, CH2, SO2; Z = OH, (halo)alkoxy, cyano, halo, etc.; Y = O, S; n = 0, 1-6] or pharmacol. acceptable salts thereof are prepared These compds. are useful for the treatment of ischemic heart disease, angina pectoris,



hypertension, pulmonary hypertension, heart failure, and asthma. Thus, 2-nitro-5-chlorobenzoic acid was refluxed with SOCl<sub>2</sub> in benzene for 4 h and concentrated to give 2-nitro-5-chlorobenzoyl chloride which was amidated with piperonylamine in the presence of Et<sub>3</sub>N in THF to give a benzamide (II; R = NO<sub>2</sub>). This compound was reduced by Fe powder in a mixture of AcOH, H<sub>2</sub>O, and MeOH under gentle refluxing to give, after concentration and treatment

with concentrated HCl in EtOH, N-piperonylanthranilamide derivative II. HCl (R =

NH<sub>2</sub>). An anthranilamide derivative (III) showed IC<sub>50</sub> of 0.4 nM against cyclic

guanosine monophosphate-phosphodiesterase preparation from pig aorta.

IT 169043-36-1P 169043-37-2P 169044-06-8P

169044-07-9P 169044-08-0P 169044-09-1P

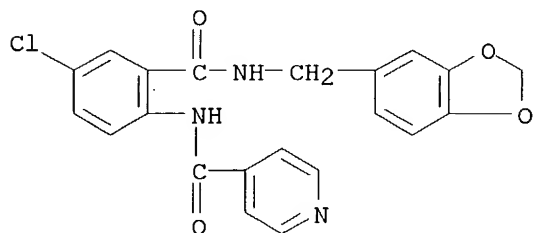
169044-10-4P 169044-11-5P 169044-56-8P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of anthranilamide derivs. as cyclic guanosine monophosphate-phosphodiesterase inhibitors)

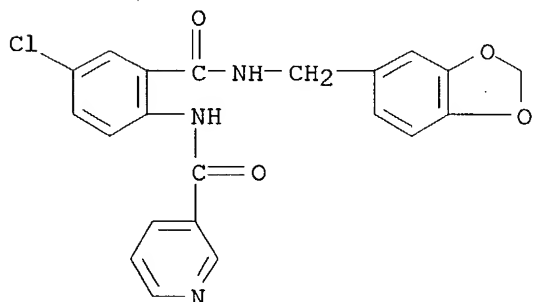
RN 169043-36-1 CAPLUS

CN 4-Pyridinecarboxamide, N-[2-[[[(1,3-benzodioxol-5-ylmethyl)amino]carbonyl]-4-chlorophenyl]- (9CI) (CA INDEX NAME)



RN 169043-37-2 CAPLUS

CN 3-Pyridinecarboxamide, N-[2-[[[(1,3-benzodioxol-5-ylmethyl)amino]carbonyl]-4-chlorophenyl]- (9CI) (CA INDEX NAME)

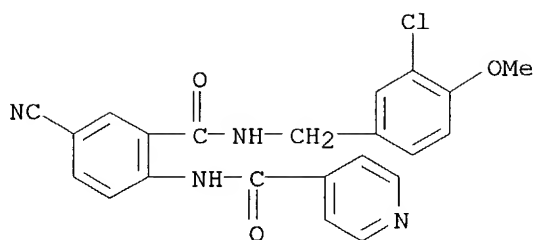


RN 169044-06-8 CAPLUS

CN 4-Pyridinecarboxamide, N-[2-[[[(3-chloro-4-methoxyphenyl)methyl]amino]carbonyl]-4-cyanophenyl]- (9CI) (CA INDEX NAME)

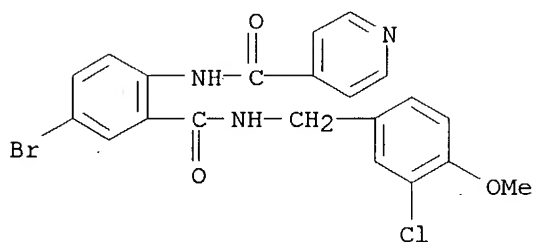


10/698643



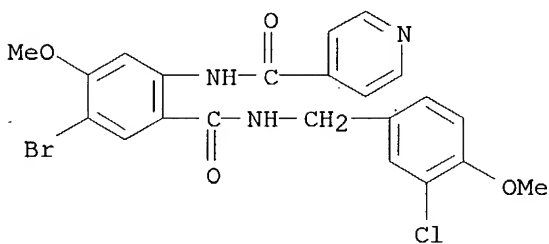
RN 169044-07-9 CAPLUS

CN 4-Pyridinecarboxamide, N-[4-bromo-2-[[[(3-chloro-4-methoxyphenyl)methyl]amino]carbonyl]phenyl]- (9CI) (CA INDEX NAME)



RN 169044-08-0 CAPLUS

CN 4-Pyridinecarboxamide, N-[4-bromo-2-[[[(3-chloro-4-methoxyphenyl)methyl]amino]carbonyl]-5-methoxyphenyl]- (9CI) (CA INDEX NAME)

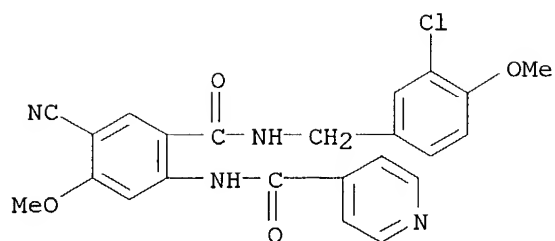


RN 169044-09-1 CAPLUS

CN 4-Pyridinecarboxamide, N-[2-[[[(3-chloro-4-methoxyphenyl)methyl]amino]carbonyl]-4-cyano-5-methoxyphenyl]- (9CI) (CA INDEX NAME)

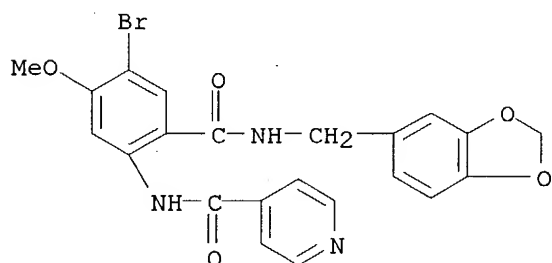


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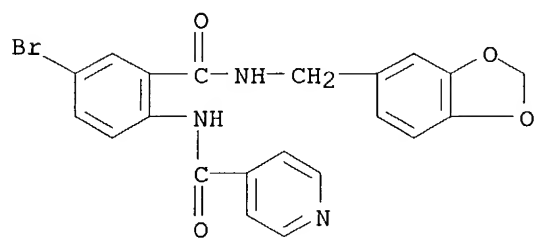
RN 169044-10-4 CAPLUS

CN 4-Pyridinecarboxamide, N-[2-[[[(1,3-benzodioxol-5-ylmethyl)amino]carbonyl]-4-bromo-5-methoxyphenyl]- (9CI) (CA INDEX NAME)



RN 169044-11-5 CAPLUS

CN 4-Pyridinecarboxamide, N-[2-[[[(1,3-benzodioxol-5-ylmethyl)amino]carbonyl]-4-bromophenyl]- (9CI) (CA INDEX NAME)

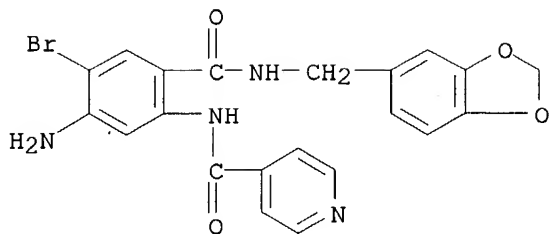


RN 169044-56-8 CAPLUS

CN 4-Pyridinecarboxamide, N-[5-amino-2-[[[(1,3-benzodioxol-5-ylmethyl)amino]carbonyl]-4-bromophenyl]- (9CI) (CA INDEX NAME)



10/698643



L70 ANSWER 11 OF 22 CAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER: 1995:841957 CAPLUS

DOCUMENT NUMBER: 123:339482

TITLE: Synthesis of boxazomycin B and related analogs

AUTHOR(S): Suto, Mark J.; Turner, William R.

CORPORATE SOURCE: Parke-Davis Pharm. Res. Div., Warner Lambert Co., Ann Arbor, MI, 48105, USA

SOURCE: Tetrahedron Letters (1995), 36(40), 7213-16

CODEN: TELEAY; ISSN: 0040-4039

PUBLISHER: Elsevier

DOCUMENT TYPE: Journal

LANGUAGE: English

OTHER SOURCE(S): CASREACT 123:339482

AB The total synthesis of the novel antibacterial agent boxazomycin B is reported. The synthesis proceeds through a highly functionalized benzene ring in which the key functionalities are introduced early in the synthesis and serve as protecting groups for addnl. transformations.

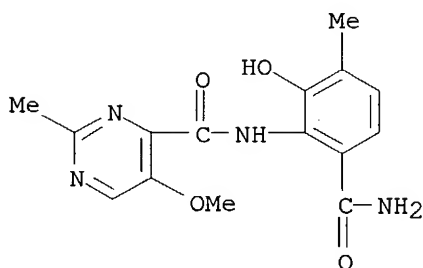
IT 171010-53-0P 171010-58-5P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(synthesis of boxazomycin B and analogs)

RN 171010-53-0 CAPLUS

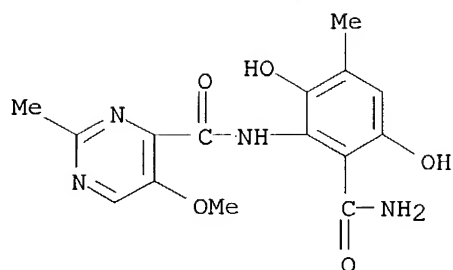
CN 4-Pyrimidinecarboxamide, N-[6-(aminocarbonyl)-2-hydroxy-3-methylphenyl]-5-methoxy-2-methyl- (9CI) (CA INDEX NAME)



RN 171010-58-5 CAPLUS

CN 4-Pyrimidinecarboxamide, N-[2-(aminocarbonyl)-3,6-dihydroxy-5-methylphenyl]-5-methoxy-2-methyl- (9CI) (CA INDEX NAME)





L70 ANSWER 12 OF 22 CAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER: 1995:746792 CAPLUS

DOCUMENT NUMBER: 123:132021

TITLE: Discovery of Potent Cyclic GMP Phosphodiesterase Inhibitors. 2-Pyridyl- and 2-Imidazolylquinazolines Possessing Cyclic GMP Phosphodiesterase and Thromboxane Synthesis Inhibitory Activities

AUTHOR(S): Lee, Sung J.; Konishi, Yoshitaka; Yu, Dingwei T.; Miskowski, Tamara A.; Riviello, Christopher M.; Macina, Orest T.; Frierson, Manton R.; Kondo, Kigen; Sugitani, Masafumi; et al.

CORPORATE SOURCE: Biofor Inc., Waverly, PA, 18471, USA

SOURCE: Journal of Medicinal Chemistry (1995), 38(18), 3547-57  
CODEN: JMCMAR; ISSN: 0022-2623

PUBLISHER: American Chemical Society

DOCUMENT TYPE: Journal

LANGUAGE: English

AB Moderate cyclic GMP phosphodiesterase (cGMP-PDE, PDE V) inhibitor 2-phenyl-4-anilinoquinazoline (I) was identified utilizing MultiCASE assisted drug design (MCADD) technol. Modification of I was conducted at the 2-, 4-, and 6-positions of the quinazoline ring for enhancement of cGMP-PDE inhibitory activity. The 6-substituted 2-(imidazol-1-yl)quinazolines are 1000 times more potent in in vitro PDE V enzyme assay than the well-known inhibitor zaprinast. The 6-substituted derivs. of 2-(3-pyridyl)quinazoline and 2-(imidazol-1-yl)quinazoline exhibited more than 1000-fold selectivity for PDE V over the other four PDE isoenzymes. In addition, 3 cGMP-PDE inhibitors were found to have an addnl. property of thromboxane synthesis inhibitory activity.

IT 157864-28-3P

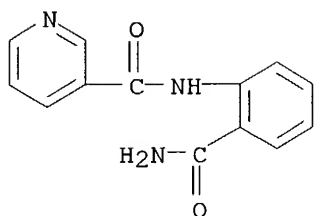
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(pyridyl- and imidazolylquinazolines as cyclic GMP phosphodiesterase and thromboxane synthesis inhibitors)

RN 157864-28-3 CAPLUS

CN 3-Pyridinecarboxamide, N-[2-(aminocarbonyl)phenyl]- (9CI) (CA INDEX NAME)





L70 ANSWER 13 OF 22 CAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER: 1995:714439 CAPLUS

DOCUMENT NUMBER: 123:216778

TITLE: Metalloheliices: Effects of Weak Interactions on Helical Morphology

AUTHOR(S): Kawamoto, Tatsuya; Prakash, Om; Ostrander, Robert; Rheingold, Arnold L.; Borovik, A. S.

CORPORATE SOURCE: Department of Chemistry, Kansas State University, Manhattan, KS, 66506, USA

SOURCE: Inorganic Chemistry (1995), 34(17), 4294-5  
CODEN: INOCAJ; ISSN: 0020-1669

PUBLISHER: American Chemical Society

DOCUMENT TYPE: Journal

LANGUAGE: English

AB The significant effects of weak interactions on the morphol. of metallohelices are demonstrated in metal complexes of the helical ligand 2,6-bis[[(N'-acetophenoyl)anthranilamide]carboxyamide]pyridine (H2L). This ligand contains 2 aryl arrays that are held rigid through hydrogen bonds and covalently attached to a pyridyl diamidate metal binding chelate. The morphologies helixes formed with H2L results from the weak interactions between the appended arrays and the tridentate chelate. H2L has a helical structure in the solid state with the 2 appendage crossing, interacting through  $\pi$ -stacking: (P.hivin.1, a 7.3507(8), b 10.627(1), and c 20.098(3) Å;  $\alpha$  96.64(1),  $\beta$  98.07(1),  $\gamma$  90.26(1)°; V = 1543.6(3) Å<sup>3</sup>, Z = 2, 3598 unique data (Fo  $\geq$  4 $\sigma$ Fo), R(Rw) = 0.0523(0.0656)). NMR and IR studies on the diamagnetic NiL complex show that the helical structure is present in solution. Structural studies by x-ray diffraction methods on the copper(II) derivs. of L2- show the large effects that coordination changes have on helical morphol. Two structural isomers were isolated for CuL: a five coordinate green compound (CuLg) and a four coordinate red complex (CuLr). The five coordinate green complex crystallized from toluene in the space

group

P.hivin.1 with two independent mols. in the asym. unit cell. The unit cell consts. are a 12.402(3), b 15.382(3), and c 23.267(5) Å,  $\alpha$  107.09(2),  $\beta$  90.68(2),  $\gamma$  104.18(2)°; V = 4096.4(15) Å<sup>3</sup>, and Z = 4. Final residuals for the refinement of 985 parameters against 9210 data were R = 0.0678 and Rw = 0.0681 with a GOF = 1.96. The four coordinate red complex crystallized from toluene in the space group

C2/c

with unit cell consts. a 24.087(6), b 12.165(3), and c 23.806 Å;  $\beta$  117.450(2)°, and Z = 8. Final residuals for the refinement of 442 parameters against 2662 data R = 0.0411 and Rw = 0.0486 with a GOF = 0.95. The differences in these two structural isomers is even more



10/698643

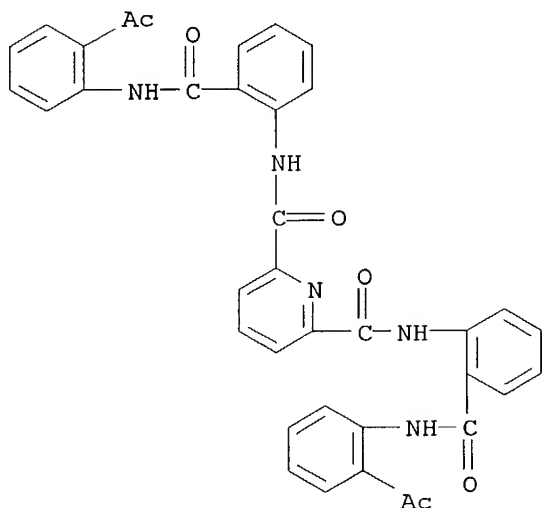
pronounced in their crystal lattices where micropores dominate the lattice architecture for CuLg and extended helixes are present in CuLr.

IT **168284-90-0**

RL: PRP (Properties); RCT (Reactant); RACT (Reactant or reagent)  
(crystal structure and complexation with copper and nickel)

RN 168284-90-0 CAPLUS

CN 2,6-Pyridinedicarboxamide, N,N'-bis[2-[(2-acetylphenyl)amino]carbonyl]phenyl]- (9CI) (CA INDEX NAME)



L70 ANSWER 14 OF 22 CAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER: 1995:71053 CAPLUS

DOCUMENT NUMBER: 122:105008

TITLE: Intra- and intermolecular hydrogen bonding control of supramolecular structure

AUTHOR(S): Hamilton, Andrew D.; Hamuro, Yoshitomo; Yang, Ji; Geib, Steven J.; Fan, Erkang

CORPORATE SOURCE: Department Chemistry, University Pittsburgh, Pittsburgh, PA, 15260, USA

SOURCE: NATO ASI Series, Series C: Mathematical and Physical Sciences (1994), 426 (COMPUTATIONAL APPROACHES IN SUPRAMOLECULAR CHEMISTRY), 101-8  
CODEN: NSCSDW; ISSN: 0258-2023

DOCUMENT TYPE: Journal

LANGUAGE: English

AB Hydrogen bonding is used to control supramol. structure in two distinct ways. The first involves intramol. hydrogen bonds to stabilize linear and helical conformations in synthetic oligomers. The second uses intermol. hydrogen bonding to direct the self-assembly of several interacting subunits.

IT **155138-99-1P 155139-01-8P**

RL: PRP (Properties); SPN (Synthetic preparation); PREP (Preparation)  
(preparation and crystallog. of)

RN 155138-99-1 CAPLUS

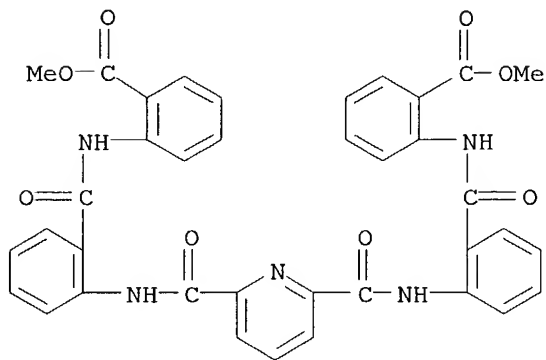
CN Benzoic acid, 2,2'-[2,6-pyridinediylbis(carbonylimino-2,1-

Searcher : Shears 571-272-2528



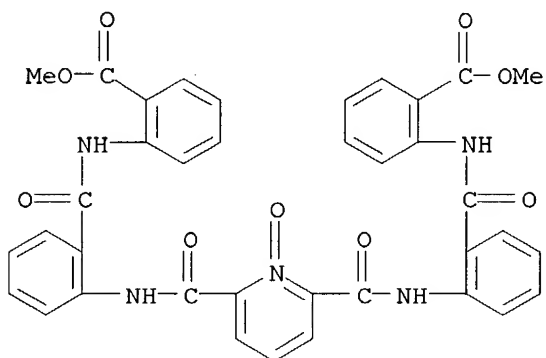
10/698643

phenylenecarbonylimino)]bis-, dimethyl ester (9CI) (CA INDEX NAME)



RN 155139-01-8 CAPLUS

CN Benzoic acid, 2,2'-[(1-oxido-2,6-pyridinediyl)bis(carbonylimino-2,1-phenylenecarbonylimino)]bis-, dimethyl ester (9CI) (CA INDEX NAME)



L70 ANSWER 15 OF 22 CAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER: 1994:620104 CAPLUS

DOCUMENT NUMBER: 121:220104

TITLE: Transition metal complexes of N-(2-benzamide)pyridine-2'-carboxamide, a potentially tridentate ligand containing one secondary and one primary amide group: preparation and characterization in the solid state  
AUTHOR(S): Manessi-Zoupa, E.; Perlepes, S. P.; Hondrellis, V.; Tsangaris, J. M.

CORPORATE SOURCE: Dep. Chem., Univ. Patras, Patras, Greece

SOURCE: Journal of Inorganic Biochemistry (1994), 55(3), 217-33

CODEN: JIBIDJ; ISSN: 0162-0134

DOCUMENT TYPE: Journal

LANGUAGE: English

AB The synthesis of N-(2-carbamoylphenyl)pyridine-2-carboxamide (LH2) is reported along with its employment as a ligand. [MCl<sub>2</sub>(LH2)<sub>2</sub>].DMF (M = Co,

Searcher : Shears 571-272-2528

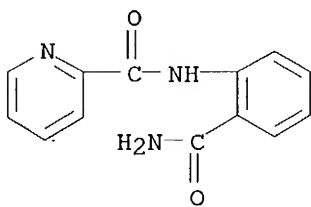


Ni), [Cu<sub>2</sub>Cl<sub>4</sub>(LH<sub>2</sub>)<sub>2</sub>].DMF, [CuCl<sub>2</sub>(LH<sub>2</sub>)<sub>2</sub>], [Co(OH)(LH)]<sub>n</sub>.nH<sub>2</sub>O, [M<sub>2</sub>(OH)<sub>2</sub>(H<sub>2</sub>O)<sub>x</sub>(LH)<sub>2</sub>] (M = Ni, Cu; x = 4, 2), [M(LH)<sub>2</sub>].xH<sub>2</sub>O (M = Ni, Cu; x = 0, 1), [Ni(H<sub>2</sub>O)<sub>2</sub>(LH)<sub>2</sub>].H<sub>2</sub>O, and [CuCl(LH)]<sub>n</sub> were isolated. The complexes were characterized by elemental analyses, conductivity measurements, x-ray powder patterns, thermal methods, variable-temperature magnetic susceptibilities, and spectroscopic (IR and far-IR, ligand field, ESR) studies. A variety of stereochemistries is assigned for the complexes in the solid state. The neutral ligand acts as a bidentate chelating agent with ligated atoms being the ring N and the secondary amide O; the LH<sup>-</sup> ion behaves as a bidentate chelating Nring, Nsecondary amide or as a tridentate Nring, Nsecondary amide, Oprimary amide ligand depending mainly on the reaction conditions.

IT **157979-82-3P**  
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)  
 (for preparation of transition metal complexes)

RN 157979-82-3 CAPLUS

CN 2-Pyridinecarboxamide, N-[2-(aminocarbonyl)phenyl]- (9CI) (CA INDEX NAME)



L70 ANSWER 16 OF 22 CAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER: 1994:323221 CAPLUS

DOCUMENT NUMBER: 120:323221

TITLE: New molecular frameworks: formation of helical secondary structures in a group of oligoanthranilamides

AUTHOR(S): Hamuro, Yoshitomo; Geib, Steven J.; Hamilton, Andrew D.

CORPORATE SOURCE: Dep. Chem., Univ. Pittsburgh, Pittsburgh, PA, 15260, USA

SOURCE: Angewandte Chemie (1994), 106(4), 465-7 (See also Angew. Chem., Int. Ed. Engl., 1994, 33(4), 446-8) CODEN: ANCEAD; ISSN: 0044-8249

DOCUMENT TYPE: Journal

LANGUAGE: German

GI

\* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT \*

AB Helical oligoanthranilamide I (R = CO<sub>2</sub>Me) was prepared from 2,6-pyridinedicarbonyl dichloride and aminobenzamide derivative II (Y = NH<sub>2</sub>).



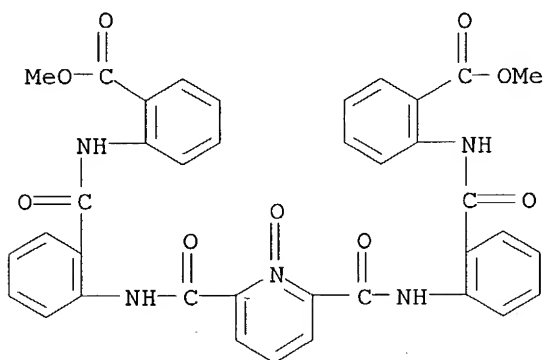
II (Y = NH<sub>2</sub>) prepared from 2-nitrobenzoyl chloride condensation with anthranilic acid Me ester to give II, Y = NO<sub>2</sub> followed by catalytic hydrogenation. I (R = CO<sub>2</sub>Me) was characterized by proton NMR and x-ray crystallog. and the nature of its helical structure discussed. Helical oligoanthranilamide III was also characterized by x-ray crystallog.

IT 155139-01-8P

RL: SPN (Synthetic preparation); PREP (Preparation)  
(preparation and crystal and mol. structure and proton NMR of,  
conformational anal. in relation to)

RN 155139-01-8 CAPLUS

CN Benzoic acid, 2,2'-[(1-oxido-2,6-pyridinediyl)bis(carbonylimino-2,1-phenylenecarbonylimino)]bis-, dimethyl ester (9CI) (CA INDEX NAME)

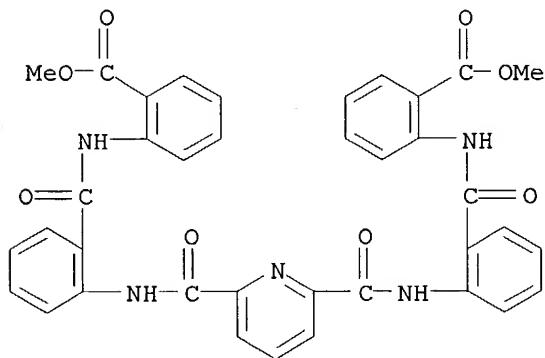


IT 155138-99-1P

RL: PRP (Properties); SPN (Synthetic preparation); PREP (Preparation)  
(preparation and crystal and mol. structure of)

RN 155138-99-1 CAPLUS

CN Benzoic acid, 2,2'-[2,6-pyridinediylbis(carbonylimino-2,1-phenylenecarbonylimino)]bis-, dimethyl ester (9CI) (CA INDEX NAME)



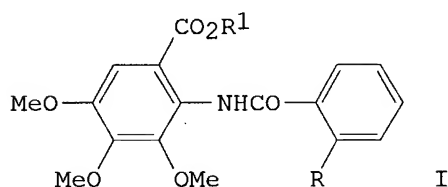
L70 ANSWER 17 OF 22 CAPLUS COPYRIGHT 2004 ACS on STN  
ACCESSION NUMBER: 1982:162351 CAPLUS  
DOCUMENT NUMBER: 96:162351



10/698643

TITLE: Anthranilic acid derivatives  
 PATENT ASSIGNEE(S): Kyoto Pharmaceutical Industries, Ltd., Japan  
 SOURCE: Jpn. Kokai Tokkyo Koho, 4 pp.  
 CODEN: JKXXAF  
 DOCUMENT TYPE: Patent  
 LANGUAGE: Japanese  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 56161362	A2	19811211	JP 1980-43744	19800403
PRIORITY APPLN. INFO.:			JP 1980-43744	19800403
OTHER SOURCE(S):	CASREACT 96:162351			
GI				



AB Four anthranilic acid derivs. I (R = NO<sub>2</sub>, NH<sub>2</sub>, nicotinamido; R<sub>1</sub> = Me, H), having smooth muscle-relaxing or contracting activity (no data), were prepared from Me 2-amino-3,4,5-trimethoxybenzoate (II). Thus, 2.45 g II acylated with 1.9 g 2-nitrobenzoyl chloride in CHCl<sub>3</sub> gave 82% I (R = NO<sub>2</sub>, R<sub>1</sub> = Me), which was reduced over Pd-C to give I (R = NH<sub>2</sub>, R<sub>1</sub> = Me). Acylation with nicotinoyl chloride gave I (R = nicotinamido, R<sub>1</sub> = Me) (III), which was hydrolyzed with 0.5 N NaOH at 40-50° to give I (R = nicotinamido, R<sub>1</sub> = H). III was also prepared by cultivating *Aspergillus terreus afficanus* IFO 8835.

IT 81469-77-4P

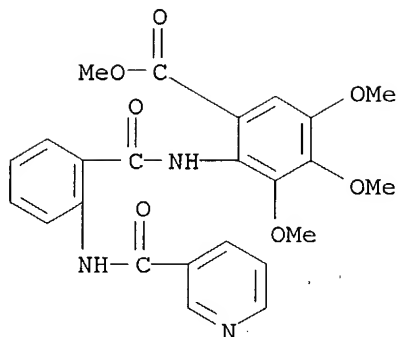
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)  
 (preparation and hydrolysis of)

RN 81469-77-4 CAPLUS

CN Benzoic acid, 3,4,5-trimethoxy-2-[[2-[(3-pyridinylcarbonyl)amino]benzoyl]amino]-, methyl ester (9CI) (CA INDEX NAME)



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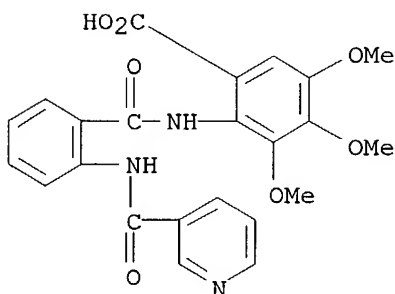


IT 81469-76-3P

RL: SPN (Synthetic preparation); PREP (Preparation)  
(preparation of)

RN 81469-76-3 CAPLUS

CN Benzoic acid, 3,4,5-trimethoxy-2-[[2-[(3-pyridinylcarbonyl)amino]benzoyl]a  
mino]- (9CI) (CA INDEX NAME)



L70 ANSWER 18 OF 22 CAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER: 1980:586283 CAPLUS

DOCUMENT NUMBER: 93:186283

TITLE: Some reactions of 2-heterocycle-4(3H)-quinazolinones  
with electrophilic reagents

AUTHOR(S): Muraoka, Keiji; Ichikawa, Masataka; Hisano, Takuzo

CORPORATE SOURCE: Fac. Pharm. Sei., Kumamoto Univ., Japan

SOURCE: Yakugaku Zasshi (1980), 100(4), 375-85

CODEN: YKKZAJ; ISSN: 0031-6903

DOCUMENT TYPE: Journal

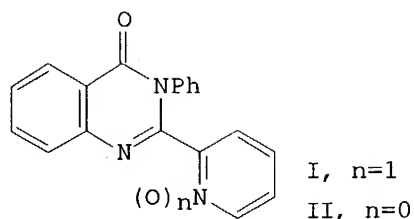
LANGUAGE: Japanese

OTHER SOURCE(S): CASREACT 93:186283

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10/698643



AB 2-(1-Oxido-2-pyridino)-3-phenyl-4(3H)-quinazolinone (I), 2-(1-oxido-2-pyridinio)-3-phenyl-4(3H)-quinazolinone 1-oxide, and the control compound, 3-phenyl-2-(2-pyridyl)-4(3H)-quinazolinone (II) were nitrated under appropriate conditions to give 3-(3-nitrophenyl)-2-(1-oxido-2-pyridinio)-4(3H)-quinazolinone, 3-(3-nitrophenyl)-2-(1-oxido-2-pyridinio)-4(3H)-quinazolinone 1-oxide, and 3-(3-nitrophenyl)-2-(2-pyridyl)-4(3H)-quinazolinone or the dinitro derivative 6-nitro-3-(3-nitrophenyl)-2-(2-pyridyl)-4(3H)-quinazolinone selectively and in comparatively higher yield. II was halogenated with N-bromosuccinimide or N-chlorosuccinimide by varying reaction temperature and concentration of H<sub>2</sub>SO<sub>4</sub>, and by

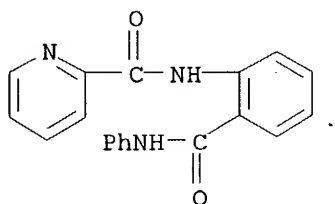
adding silver sulfate as an activator, to give 3-(3-bromophenyl)-2-(2-pyridyl)-4(3H)-quinazolinone and 6-bromo-3-phenyl-2-(2-pyridyl)-4(3H)-quinazolinone or the dihalides 3-(3,4-dibromophenyl)-2-(2-pyridyl)-4(3H)-quinazolinone or 6-bromo-3-(3-bromophenyl)-2-(2-pyridyl)-4(3H)-quinazolinone, and a further derivative which was presumably a trihalide.

IT 75359-17-0 75359-18-1

RL: RCT (Reactant); RACT (Reactant or reagent)  
(cyclization of)

RN 75359-17-0 CAPLUS

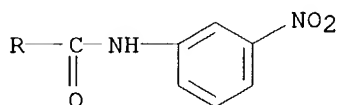
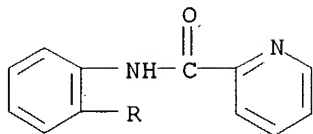
CN 2-Pyridinecarboxamide, N-[2-[(phenylamino)carbonyl]phenyl]- (9CI) (CA INDEX NAME)



RN 75359-18-1 CAPLUS

CN 2-Pyridinecarboxamide, N-[2-[[3-nitrophenyl]amino]carbonyl]phenyl]- (9CI)  
(CA INDEX NAME)

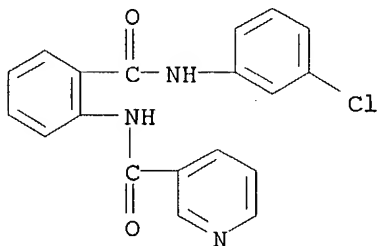




L70 ANSWER 19 OF 22 CAPLUS COPYRIGHT 2004 ACS on STN  
 ACCESSION NUMBER: 1973:546545 CAPLUS  
 DOCUMENT NUMBER: 79:146545  
 TITLE: 2-Pyridyl-4(3H)-quinazolinones  
 INVENTOR(S): Hisano, Takuzo; Ichikawa, Masataka; Ide, Hiroyuki;  
 Noda, Kanji; Nakagawa, Akira; Motomura, Toshiharu  
 PATENT ASSIGNEE(S): Hisamitsu Pharmaceutical Co., Inc.  
 SOURCE: Jpn. Kokai Tokkyo Koho, 7 pp.  
 CODEN: JKXXAF  
 DOCUMENT TYPE: Patent  
 LANGUAGE: Japanese  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

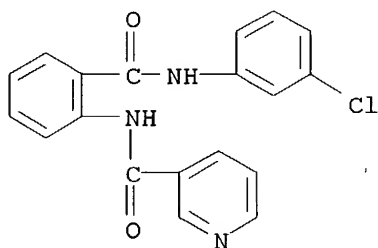
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 48062779	A2	19730901	JP 1971-98092	19711203
JP 54034749	B4	19791029		
PRIORITY APPLN. INFO.:			JP 1971-98092	19711203

GI For diagram(s), see printed CA Issue.  
 AB Quinazolinones (I) were prepared by cyclizing, e.g., 2-nicotinamido-3'-chlorobenzanilide (II). Thus, heating II 18 hr at 200° gave I (R = m-Cl, pyridyl 3-substituted). Similarly, 18 addnl. I were prepared  
 IT 39122-37-7  
 RL: RCT (Reactant); RACT (Reactant or reagent)  
 (cyclization of, pyridylquinazolinone from)  
 RN 39122-37-7 CAPLUS  
 CN 3-Pyridinecarboxamide, N-[2-[(3-chlorophenyl)amino]carbonyl]phenyl]-  
 (9CI) (CA INDEX NAME)





L70 ANSWER 20 OF 22 CAPLUS COPYRIGHT 2004 ACS on STN  
 ACCESSION NUMBER: 1973:58340 CAPLUS  
 DOCUMENT NUMBER: 78:58340  
 TITLE: Syntheses and pharmacological activities of  
 2-heterocyclic substituted 4(3H)-quinazolinone  
 derivatives  
 AUTHOR(S): Hisano, Takuzo; Ichikawa, Masataka; Kito, Go; Nishi,  
 Tomoyuki  
 CORPORATE SOURCE: Fac. Pharm. Sci., Kumamoto Univ., Kumamoto, Japan  
 SOURCE: Chemical & Pharmaceutical Bulletin (1972), 20(12),  
 2575-84  
 CODEN: CPBTAL; ISSN: 0009-2363  
 DOCUMENT TYPE: Journal  
 LANGUAGE: English  
 AB The preparation of a series of 2-pyridyl-4(3H)-quinazolinones is described.  
 Studies on the structure-activity relationship demonstrated that  
 2-pyridyl, 3-pyridyl, and 4-pyridyl substitution at 2 position of  
 quinazolinone ring, and o-, m-, and p-substitution of the aromatic ring at  
 3 position are suitable for manifestation of hypnotic activity. The order  
 of potency of activities produced by the difference in the position of  
 substitution of substituents at 2 and 3 position decreased in the order of  
 4-pyridyl, o-tolyl > 3-pyridyl, o-tolyl > 2-pyridyl, o-tolyl. The  
 anthranilates of these 4(3H)-quinazolinones were inactive. A maximum  
 hypnotic effect accompanied with other potent pharmacol. properties was  
 observed in 2-(4-pyridyl)-3-o-tolyl-4(3H)-quinazolinone, the potency of  
 which was equal to or stronger than Methaqualone in mice.  
 IT 39122-37-7P  
 RL: SPN (Synthetic preparation); PREP (Preparation)  
 (preparation of)  
 RN 39122-37-7 CAPLUS  
 CN 3-Pyridinecarboxamide, N-[2-[[ (3-chlorophenyl) amino] carbonyl] phenyl]-  
 (9CI) (CA INDEX NAME)



L70 ANSWER 21 OF 22 CAPLUS COPYRIGHT 2004 ACS on STN  
 ACCESSION NUMBER: 1966:403958 CAPLUS  
 DOCUMENT NUMBER: 65:3958  
 ORIGINAL REFERENCE NO.: 65:699h,700a-f  
 TITLE: Syntheses and reactions of imidazoles  
 AUTHOR(S): Almirante, L.; Mugnaini, A.; Fritz, L. Polo;  
 Provinciali, E.  
 CORPORATE SOURCE: Lab. Bioterapio Milanese Selvi, Milan



SOURCE: Bollettino Chimico Farmaceutico (1966), 105(1), 32-44  
 CODEN: BCFAAI; ISSN: 0006-6648  
 DOCUMENT TYPE: Journal  
 LANGUAGE: Italian  
 OTHER SOURCE(S): CASREACT 65:3958

AB 2-Aminopyridine (I) (425 g.), and 450 g. BrCH<sub>2</sub>CH(OMe)<sub>2</sub> (II) in 500 ml. toluene refluxed 16 hrs. gave 1-(2,2-di-methoxyethyl)-2-aminopyridinium bromide, which was made basic in 400 ml. H<sub>2</sub>O to yield 322 g. 1-(2,2-dimethoxyethyl)-2-imino-1,2-dihydropyridine (III), b1 108°; HCl salt m. 184-5° (EtOH). Similarly was prepared the 4-methyl derivative of III, b2 137°; picrate m. 147-8° (EtOH). III b2.5 123-6°, was also obtained from 19 g. I, 33.8 g. II, and 20.16 NaHCO<sub>3</sub> by boiling 25 hrs. in 40 ml. PhMe. By this method were prepared the 6-methyl derivative of III, b1.5 120°, 2-imino-1-(2,2-dimethoxyethyl)pyrimidine, b2.5 123° [picrate m. 135-6° (EtOH)], and 1-(2,2-dimethoxyethyl)-2-imino-1,2-dihydrothiazole, b2 112°; HCl salt m. 156-7° (iso-PrOH). III (322 g.) was added slowly to 1750 ml. H<sub>2</sub>SO<sub>4</sub> at 0° and the solution kept 5 hrs. at 90° to give 203 g. imidazo[1,2-a]pyridine (IV), b0.5 97° [n]<sub>D</sub> 20D 1.6211; picrate m. 216-17° (EtOH). Similarly, 5-methylimidazo[1,2-a]pyridine, b1.5 109° [picrate m. 232-3° (EtOH)], 7-methylimidazo[1,2-a]pyridine b0.7 113° [picrate m. 223-4° (EtOH)], imidazo[1,2-a]pyrimidine, m. 131-3° (C<sub>6</sub>H<sub>6</sub>), and imidazo[1,2-b]thiazole, b2 106° [picrate m. 205-6° (EtOH)], were prepared II (11.2 g.) in 11 ml. H<sub>2</sub>O containing 2.5 ml. 48%

HBr was

shaken 2 hrs., poured into 150 ml. H<sub>2</sub>O, treated with 25 g. NaHCO<sub>3</sub> and 8 g. 5-bromo-2-aminopyridine, and shaken 7 hrs. at 20° to give 76% 6-bromoimidazo[1,2-a]pyridine, b1.5 165°, m. 53-5°; perchlorate, m. 236-8° (EtOH). Similarly, 6-chloroimidazo[1,2-a]pyridine, b1.5 132° [perchlorate m. 223-4° (EtOH)] was prepared 2-Aminopyrimidine (19 g.), and 13.7 g. BrCH<sub>2</sub>OMe suspended in 80 ml. EtOH was heated 3 hrs. at 60° to give 29% 2-methylimidazo[1,2-a]pyrimidine hydrobromide, m. 254-5°. Similarly, 2-methylimidazo[1,2-a]pyridine b2 105° [HCl salt, 195-6° (EtOH)], and 2,5-dimethylimidazo[1,2-a]pyridine b0.5 112° [perchlorate 215-16° (EtOH)] were obtained. IV (5.9 g.) and 2.25 g. Me<sub>2</sub>NH in AcOH was mixed with 1.5 g. HCHO and 25 ml. AcOH, and heated 3 hrs. at 60° to give 6.7 g. hygroscopic 3-(dimethylaminomethyl)imidazo[1,2-a]pyridine, m. 80-1° (ligroine); methiodide m. 233-4° (EtOH). Similarly, 2-methyl-2-(dimethylaminomethyl)imidazo[1,2-a]pyridine-2HCl, m. 250-1° (EtOH-Et<sub>2</sub>O) [methiodide m. 200-1° (decomposition) (EtOH)], 2-methyl-3-(diethylaminomethyl)imidazo[1,2-a]pyridine-2HCl.H<sub>2</sub>O, m. 203° (decomposition) (EtOH-Et<sub>2</sub>O), 2-methyl-3-(morpholinomethyl)imidazo[1,2-a]pyridine, m. 93-5° (ligroine), 2-methyl-3-[4(β-hydroxyethyl)-piperazin-1-ylmethyl]imidazo[1,2-a]pyridine, m. 167-9° (C<sub>6</sub>H<sub>6</sub>C<sub>6</sub>H<sub>12</sub>), 2-methyl-3-[bis-(2-hydroxyethyl)aminomethyl]imidazo[1,2-a]pyridine, m. 114-16° (C<sub>6</sub>H<sub>6</sub>), 7-methyl-3-(dimethylaminomethyl)imidazo[1,2-a]pyridine-2HCl, 250-2° (C<sub>6</sub>H<sub>6</sub>) [methiodide m. 232-3° (decomposition) (EtOH)], and 2-(p-chlorophenyl)-3-(di-methylaminomethyl)imidazo[1,2-a]pyridine-2HCl, m. 222-4° (EtOH-Et<sub>2</sub>O), [methiodide m. 220-22° (decomposition) (EtOH)], were prepared IV (11.8 g.) in 20 ml. Me<sub>2</sub>NCHO was treated with 46.5 g. POCl<sub>3</sub> in 60 ml. Me<sub>2</sub> NCHO with shaking at 0° and then



10/698643

to yield the corresponding acyl halide, which without further separation,  
was

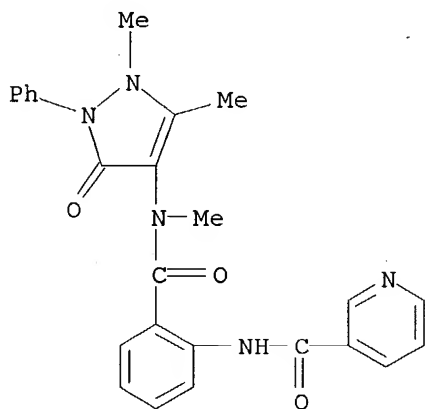
condensed with I or its derivs. Compds. prepared include  
4-[p-(nicotinoylamino)benzoyl]aminoantipyrine (III), 55.4%; the  
p-(nicotinoylamino)benzoyl; p-methylamino analog 93.3%; the 4-N-Me  
derivative

of III, the 4-N-benzyl derivative of III, 34.7%; and 4- N- methyl-4 - N-  
nicotinoylanthranilylaminoantipyrine. Condensation of I with II yielded,  
owing to ring closure, 2-( $\beta$ -pyridyl)-3-(4-antipyrinyl)-4-quinazolone,  
instead of the expected condensation compound

IT 6188-07-4, Nicotinanilide, 2'-(antipyrinylmethylcarbamoyl)-  
(preparation of)

RN 6188-07-4 CAPLUS

CN Nicotinanilide, 2'-(antipyrinylmethylcarbamoyl)- (7CI, 8CI) (CA INDEX  
NAME)



FILE 'REGISTRY' ENTERED AT 14:48:42 ON 12 NOV 2004

L71 56 SEA FILE=REGISTRY ABB=ON PLU=ON (155138-99-1/BI OR 155139-01-  
8/BI OR 39122-37-7/BI OR 6188-07-4/BI OR 157864-28-3/BI OR  
157979-82-3/BI OR 168284-90-0/BI OR 169043-36-1/BI OR 169043-37  
-2/BI OR 169044-06-8/BI OR 169044-07-9/BI OR 169044-08-0/BI OR  
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81469-76-3/BI OR 81469-77-4/BI)

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L72 1 S L71

L72 ANSWER 1 OF 1 CAOLD COPYRIGHT 2004 ACS on STN



10/698,643

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=> file reg

COST IN U.S. DOLLARS

SINCE FILE

TOTAL

ENTRY

SESSION

FULL ESTIMATED COST

0.18

158.61

FILE 'REGISTRY' ENTERED AT 08:57:12 ON 15 NOV 2004

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STRUCTURE FILE UPDATES: 14 NOV 2004 HIGHEST RN 780728-63-4

DICTIONARY FILE UPDATES: 14 NOV 2004 HIGHEST RN 780728-63-4

TSCA INFORMATION NOW CURRENT THROUGH MAY 21, 2004

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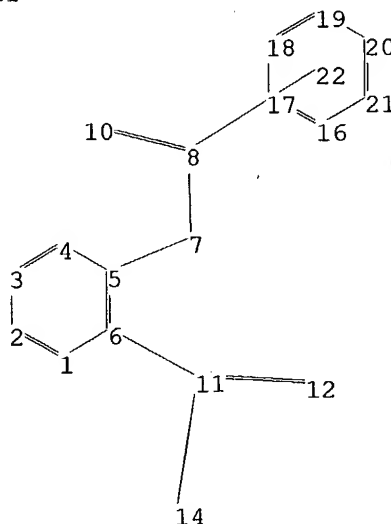
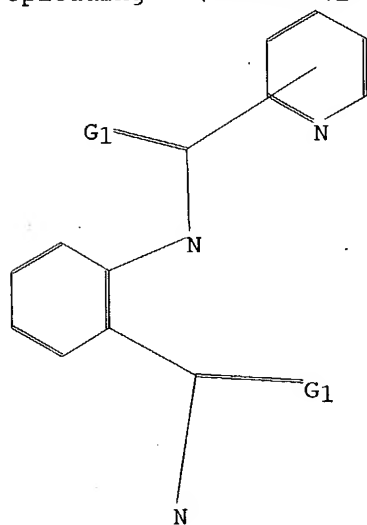
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Experimental and calculated property data are now available. For more information enter HELP PROP at an arrow prompt in the file or refer to the file summary sheet on the web at:

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chain nodes :



7 8 10 11 12 14  
 ring nodes :  
 1 2 3 4 5 6 16 17 18 19 20 21  
 chain bonds :  
 5-7 6-11 7-8 8-10 11-12 11-14  
 ring bonds :  
 1-2 1-6 2-3 3-4 4-5 5-6 16-17 16-21 17-18 18-19 19-20 20-21  
 exact/norm bonds :  
 5-7 7-8 8-10 11-12 11-14  
 exact bonds :  
 6-11  
 normalized bonds :  
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 isolated ring systems :  
 containing 1 :

G1:O,S

Match level :

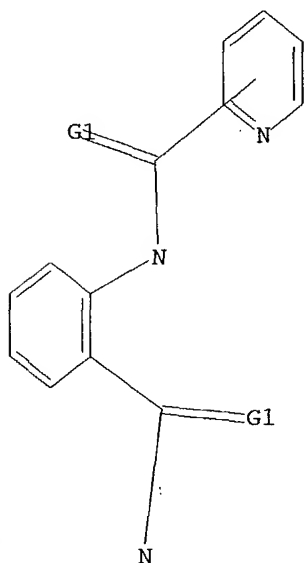
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 11:CLASS 12:CLASS 14:CLASS 16:CLASS 17:Atom 18:Atom 19:Atom 20:Atom 21:Atom  
 22:CLASS

L6 STRUCTURE UPLOADED

=> dis 16

L6 HAS NO ANSWERS

L6 STR



G1 O,S

Structure attributes must be viewed using STN Express query preparation.



=&gt; s 16 sam

SAMPLE SEARCH INITIATED 08:57:33 FILE 'REGISTRY'  
 SAMPLE SCREEN SEARCH COMPLETED - 442 TO ITERATE

100.0% PROCESSED 442 ITERATIONS 24 ANSWERS  
 SEARCH TIME: 00.00.01

FULL FILE PROJECTIONS: ONLINE \*\*COMPLETE\*\*  
 BATCH \*\*COMPLETE\*\*  
 PROJECTED ITERATIONS: 7579 TO 10101  
 PROJECTED ANSWERS: 187 TO 773

L7 24 SEA SSS SAM L6

=&gt; s 16 full

FULL SEARCH INITIATED 08:57:38 FILE 'REGISTRY'  
 FULL SCREEN SEARCH COMPLETED - 8762 TO ITERATE

100.0% PROCESSED 8762 ITERATIONS 569 ANSWERS  
 SEARCH TIME: 00.00.01

L8 569 SEA SSS FUL L6

=&gt; file hcaplus

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 FILE LAST UPDATED: 14 Nov 2004 (20041114/ED)

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=&gt; s 18

L9 75 L8

=> s 19 and pd<march 2000  
 20458207 PD<MARCH 2000



(PD&lt;20000300)

L10 33 L9 AND PD&lt;MARCH 2000

=&gt; dis his

L6 STRUCTURE UPLOADED

L7 24 S L6 SAM

L8 569 S L6 FULL

FILE 'HCAPLUS' ENTERED AT 08:57:45 ON 15 NOV 2004

L9 75 S L8

L10 33 S L9 AND PD&lt;MARCH 2000

=&gt; dis l10 1-33 bib abs hitstr

L10 ANSWER 1 OF 33 HCAPLUS COPYRIGHT 2004 ACS on STN

AN 2000:880369 HCAPLUS

DN 135:40545

TI Phase I trial of XR9576 in healthy volunteers demonstrates modulation of P-glycoprotein in CD56+ lymphocytes after oral and intravenous administration

AU Stewart, Alistair; Steiner, Jan; Mellows, Graham; Laguda, Bim; Norris, David; Bevan, Paul

CS Xenova, Ltd., Slough, SL1 4EF, UK

SO Clinical Cancer Research (2000), 6(11), 4186-4191

CODEN: CCREF4; ISSN: 1078-0432

PB American Association for Cancer Research

DT Journal

LA English

AB XR9576 is a novel inhibitor of P-glycoprotein (P-gp) that has been shown to reverse P-gp-dependent multidrug-resistance in tumor cell lines and tumor-bearing animals. This work reports the i.v. and oral administration of XR9576 to healthy volunteers in dose-escalating studies with the aim of investigating its safety, its pharmacokinetics, and effects on a surrogate marker of efficacy (CD56+ lymphocytes instead of tumors). XR9576 was administered as a single dose-upward titration of 0.1, 0.2, 0.5, 1.0, and 2 mg/kg i.v. or 50, 100, 200, 500, and 750 mg/volunteer orally. The surrogate marker for in vivo efficacy examined the accumulation of the P-gp substrate Rhodamine-123 (Rh-123) in P-gp-expressing CD56+ lymphocytes by flow cytometry. Addition of Rh-123 to blood from subjects given XR9576 or a placebo demonstrated drug-dependent modulation of P-gp activity. Even at the lowest doses, significant effects on Rh-123 accumulation in CD56+ cells were observed. Maximal effects occurred during the i.v. infusion or 4-6 h after oral administration. As the dose was increased, a concomitant rise in the extent and duration of P-gp blockade was observed. A dose of 2.0 mg/kg i.v. and  $\geq 200$  mg/volunteer orally gave approx. 100% inhibition of P-gp for  $>24$  h. All doses of XR9576 tested were well tolerated. Inhibition increased with plasma XR9576 concentration, and maximal activity was achieved at 150-200 ng XR9576/mL. In conclusion, XR9576 produced sustained inhibition of P-gp after i.v. and oral administration. Supported by the elimination half-life of about 24 h, XR9576 is being taken into Phase II trials as a once-daily agent.

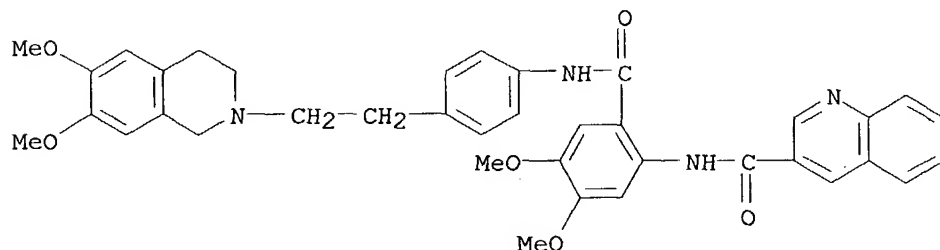
IT 206873-63-4, XR 9576

RL: BAC (Biological activity or effector, except adverse); BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)

(XR9576 modulation of P-glycoprotein in CD56+ lymphocytes after oral and i.v. administration to humans)



RN 206873-63-4 HCAPLUS  
 CN 3-Quinolinescarboxamide, N-[2-[[[4-[2-(3,4-dihydro-6,7-dimethoxy-2(1H)-isoquinolinyl)ethyl]phenyl]amino]carbonyl]-4,5-dimethoxyphenyl]- (9CI)  
 (CA INDEX NAME)



RE.CNT 13 THERE ARE 13 CITED REFERENCES AVAILABLE FOR THIS RECORD  
 ALL CITATIONS AVAILABLE IN THE RE FORMAT

L10 ANSWER 2 OF 33 HCAPLUS COPYRIGHT 2004 ACS on STN

AN 2000:695199 HCAPLUS

DN 134:5213

TI Folding Dendrons: The Development of Solvent-, Temperature-, and Generation-Dependent Chiral Conformational Order in Intramolecularly Hydrogen-Bonded Dendrons

AU Recker, Janosch; Tomcik, Dennis J.; Parquette, Jon R.

CS Department of Chemistry, The Ohio State University, Columbus, OH, 43210, USA

SO Journal of the American Chemical Society (2000), 122(42), 10298-10307

CODEN: JACSAT; ISSN: 0002-7863

PB American Chemical Society

DT Journal

LA English

AB The synthesis of intramolecularly hydrogen-bonded dendrons with stereogenic terminal groups derived from (1S,2S)-(+)-thiomine up to the third generation is described. CD studies reveal that the equilibrium interconverting two diastereomeric helical conformations (M and P helices) relating a pair of anthranilamide termini depends on solvent, temperature, and dendrimer generation. A conformational preference for M-type helicity along the periphery of the dendrons increased with increasing dendrimer generation and in poor solvents as observed by CD. Equilibration of these diastereomeric helical conformations is rapid at the first generation in all solvents and at all temps. investigated; however, at the second generation the equilibrium begins to bias a single diastereomeric helical conformation along the periphery that becomes maximal at low temps. and in poor solvents. At the third generation, the helical bias is intrinsically higher so that the conformational preference of the termini becomes much less sensitive to solvent and temperature, and the unfolding process becomes more difficult. We propose that nonbonded repulsive interactions that increase with generation and in poor solvents couple the motions and conformational preferences of each pair of terminal groups through their correlated rotations and contribute to the stability of the M helical conformation of the terminal groups. This represents the first example of well-defined asym. secondary structure occurring in a dendrimer system.

IT 308245-27-4P

RL: PRP (Properties); SPN (Synthetic preparation); PREP (Preparation)

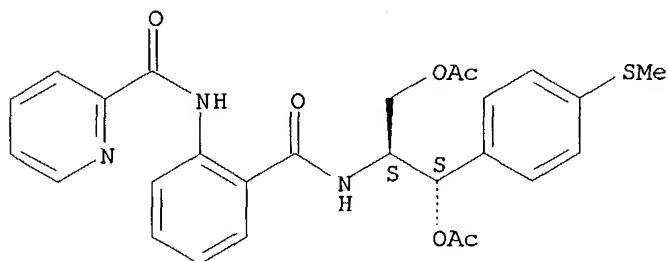


(in preparation and characterization of intramolecularly hydrogen-bonded dendrimer)

RN 308245-27-4 HCAPLUS

CN 2-Pyridinecarboxamide, N-[2-[[[(1S,2S)-2-(acetyloxy)-1-[(acetyloxy)methyl]-2-[4-(methylthio)phenyl]ethyl]amino]carbonyl]phenyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



IT 308245-25-2P 308245-26-3P

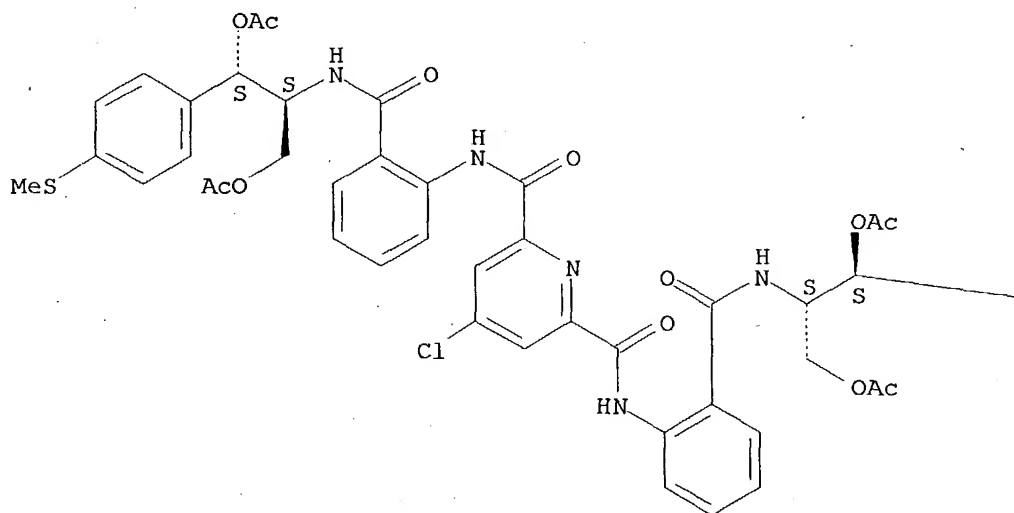
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(in preparation and characterization of intramolecularly hydrogen-bonded dendrimer)

RN 308245-25-2 HCAPLUS

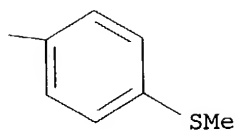
CN 2,6-Pyridinedicarboxamide, N,N'-bis[2-[[[(1S,2S)-2-(acetyloxy)-1-[(acetyloxy)methyl]-2-[4-(methylthio)phenyl]ethyl]amino]carbonyl]phenyl]-4-chloro- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



PAGE 1-A

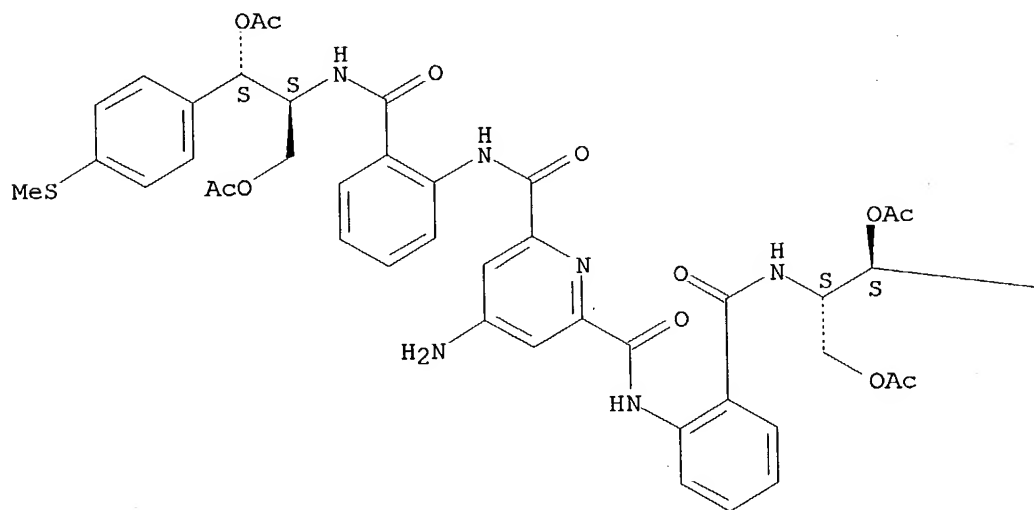




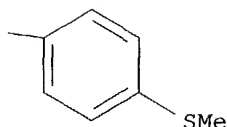
RN 308245-26-3 HCAPLUS  
 CN 2,6-Pyridinedicarboxamide, N,N'-bis[2-[[[(1S,2S)-2-(acetyloxy)-1-  
 [(acetyloxy)methyl]-2-[4-(methylthio)phenyl]ethyl]amino]carbonyl]phenyl]-4-  
 amino- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A







RE.CNT 95 THERE ARE 95 CITED REFERENCES AVAILABLE FOR THIS RECORD  
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L10 ANSWER 3 OF 33 HCAPLUS COPYRIGHT 2004 ACS on STN

AN 2000:621133 HCAPLUS

DN 133:305245

TI Drug Binding Sites on P-Glycoprotein Are Altered by ATP Binding Prior to Nucleotide Hydrolysis

AU Martin, Catherine; Berridge, Georgina; Mistry, Prakash; Higgins, Christopher; Charlton, Peter; Callaghan, Richard

CS Nuffield Department of Clinical Laboratory Sciences John Radcliffe Hospital, University of Oxford, Oxford, OX3 9DU, UK

SO Biochemistry (2000), 39(39), 11901-11906

CODEN: BICHAW; ISSN: 0006-2960

PB American Chemical Society

DT Journal

LA English

AB P-glycoprotein (P-gp) confers multiple drug resistance on cancer cells by acting as a plasma membrane localized ATP-dependent drug efflux pump. Currently, there is little information on the nature of the communication between the energy-providing nucleotide binding domains (NBDs) and the drug binding sites of P-gp to generate transport of substrate. Many substrates and modulators cause alterations in ATP hydrolysis, but what effect do the various stages of the catalytic cycle have on drug interaction with P-gp. Vanadate trapping of Mg·ADP caused a reversible decrease in the binding capacity of the transported substrate [3H]-vinblastine and the nontransported modulator [3H]XR9576 to P-gp in CHrB30 cell membranes. The non-hydrolyzable nucleotide analog ATP-γ-S also caused a reduction in the binding capacity of [3H]-vinblastine but not for the modulator [3H]XR9576. This indicates that signaling to the NBDs following binding of a nontransported modulator is different to that transmitted upon interaction of a transported substrate. Second, it appears that the binding of nucleotide, rather than its hydrolysis, causes the initial conformational shift in the drug-binding site during a transport cycle.

IT 206873-63-4, XR 9576

RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)

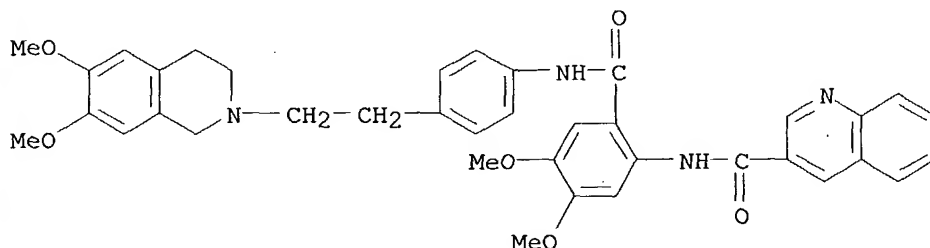
(XR 9576; drug binding sites on P-glycoprotein are altered by ATP



binding prior to nucleotide hydrolysis in relation to multiple drug resistance (conformational shift)

RN 206873-63-4 HCAPLUS

CN 3-Quinolinecarboxamide, N-[2-[[[4-[2-(3,4-dihydro-6,7-dimethoxy-2(1H)-isoquinolinyl)ethyl]phenyl]amino]carbonyl]-4,5-dimethoxyphenyl]- (9CI)  
(CA INDEX NAME)



RE.CNT 48 THERE ARE 48 CITED REFERENCES AVAILABLE FOR THIS RECORD  
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L10 ANSWER 4 OF 33 HCAPLUS COPYRIGHT 2004 ACS on STN

AN 2000:614974 HCAPLUS

DN 133:291075

TI Communication between multiple drug binding sites on P-glycoprotein

AU Martin, Catherine; Berridge, Georgina; Higgins, Christopher F.; Mistry, Prakash; Charlton, Peter; Callaghan, Richard

CS Department of Clinical Laboratory Sciences, John Radcliffe Hospital, University of Oxford, UK

SO Molecular Pharmacology (2000), 58(3), 624-632

CODEN: MOPMA3; ISSN: 0026-895X

PB American Society for Pharmacology and Experimental Therapeutics

DT Journal

LA English

AB P-glycoprotein, a member of the ATP-binding cassette transporter family, is able to confer resistance on tumors against a large number of functionally and chemically distinct cytotoxic compounds. Several recent investigations suggest that P-glycoprotein contains multiple drug binding sites rather than a single site of broad substrate specificity. In the present study, radioligand-binding techniques were used to directly characterize drug interaction sites on P-glycoprotein and how these multiple sites interact. The drugs used were classified as either (1) substrates, which are known to be transported by P-glycoprotein (e.g., vinblastine) or (2) modulators, which alter P-glycoprotein function but are not themselves transported by the protein (e.g., XR9576). Drug interactions with P-glycoprotein were either competitive, at a common site, or noncompetitive, and therefore at distinct sites. Based on these data, we can assign a minimum of four drug binding sites on P-glycoprotein. These sites fall into two categories: transport, at which translocation of drug across the membrane can occur, and regulatory sites, which modify P-glycoprotein function. Intriguingly, however, some modulators interact with P-glycoprotein at a transport site rather than a regulatory site. The pharmacological data also demonstrate that both transport and regulatory sites are able to switch between high- and low-affinity conformations. The multiple sites on P-glycoprotein display complex allosteric interactions through which interaction of drug at one site switches other sites between high- or low-affinity conformations. The data are discussed in terms of a model for the mechanism of transport



by P-glycoprotein.

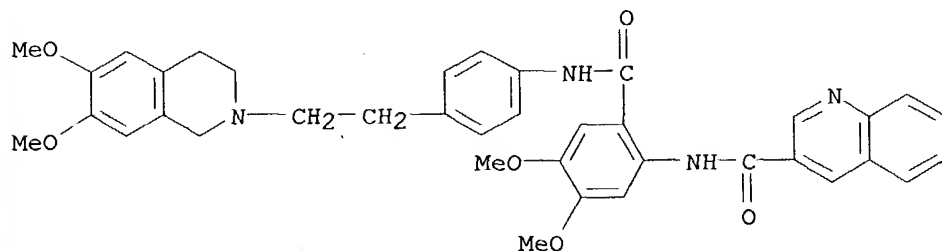
IT 206873-63-4, XR 9576

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); BIOL (Biological study)

(communication between multiple drug binding sites on P-glycoprotein)

RN 206873-63-4 HCAPLUS

CN 3-Quinolinecarboxamide, N-[2-[[[4-[2-(3,4-dihydro-6,7-dimethoxy-2(1H)-isoquinolinyl)ethyl]phenyl]amino]carbonyl]-4,5-dimethoxyphenyl]- (9CI)  
(CA INDEX NAME)



RE.CNT 40 THERE ARE 40 CITED REFERENCES AVAILABLE FOR THIS RECORD  
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L10 ANSWER 5 OF 33 HCAPLUS COPYRIGHT 2004 ACS on STN

AN 2000:68948 HCAPLUS

DN 132:251284

TI Total Synthesis of the Fumiquinazoline Alkaloids: Solution-Phase Studies

AU Wang, Haishan; Ganesan, A.

CS Institute of Molecular and Cell Biology, National University of Singapore, Singapore, 117609, Singapore

SO Journal of Organic Chemistry (2000), 65(4), 1022-1030

CODEN: JOCEAH; ISSN: 0022-3263

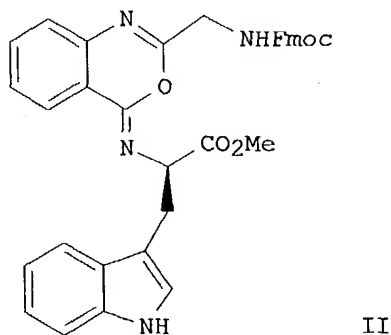
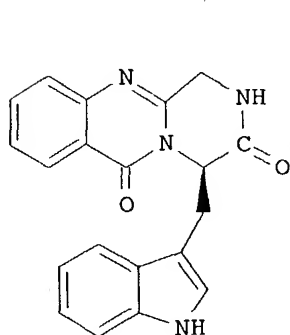
PB American Chemical Society

DT Journal

LA English

OS CASREACT 132:251284

GI



AB Biomimetic total syntheses of gyantrypine (I), fumiquinazoline F, fumiquinazoline G, and fiscalin B were achieved in four steps from



tryptophan Me ester. In the key step, the anthranilamide residue in a linear tripeptide is dehydrated to a benzoxazine, e.g. II, by reaction with triphenylphosphine, iodine, and a tertiary amine. The benzoxazines subsequently undergo rearrangement to the natural products via an amidine intermediate. This dehydrative oxazine to quinazoline route is applicable to a broad range of N-acylanthranilamides, including sterically hindered cases.

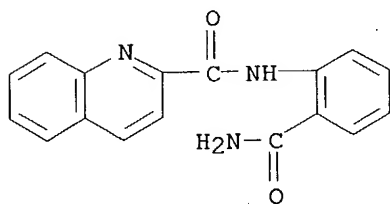
IT 262590-33-0

RL: RCT (Reactant); RACT (Reactant or reagent)

(total synthesis of fumiquinazoline alkaloids, solution-phase studies)

RN 262590-33-0 HCAPLUS

CN 2-Quinolinecarboxamide, N-[2-(aminocarbonyl)phenyl]- (9CI) (CA INDEX NAME)



RE.CNT 20 THERE ARE 20 CITED REFERENCES AVAILABLE FOR THIS RECORD  
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L10 ANSWER 6 OF 33 HCAPLUS COPYRIGHT 2004 ACS on STN

AN 1999:651313 HCAPLUS

DN 132:8771

TI The molecular interaction of the high affinity reversal agent XR9576 with P-glycoprotein

AU Martin, Catherine; Berridge, Georgina; Mistry, Prakash; Higgins, Christopher; Charlton, Peter; Callaghan, Richard

CS Nuffield Department of Clinical Biochemistry & Cellular Science, John Radcliffe Hospital, University of Oxford, Oxford, OX3 9DU, UK

SO British Journal of Pharmacology (1999), 128(2), 403-411  
CODEN: BJPCBM; ISSN: 0007-1188

PB Stockton Press

DT Journal

LA English

AB 1 The kinetics and nature of equilibrium binding were used to characterize the mol. interaction of the anthranilic acid derivative [3H]-XR9576 with the multidrug resistance P-glycoprotein (P-gp). XR9576 displayed specific high-affinity binding to P-gp ( $B_{max} = 275 \text{ pmol mg}^{-1}$ ,  $K_d = 5.1 \text{ nM}$ ). The transport substrates [3H]-vinblastine and [3H]-paclitaxel displayed 4 fold and 20 fold lower affinity resp. for P-gp. The duration of action of XR9576 with P-gp was increased in comparison to that of vinblastine which displayed a slower rate of association and a faster dissociation rate. 2 The relative affinities of several modulators and transport substrates to interact with P-gp were determined from displacement drug equilibrium binding assays. Vinblastine and paclitaxel could only fractionally displace [3H]-XR9576 binding, displaying  $K_i$  values significantly different from their measured  $K_d$  values. This suggests a non-competitive interaction between XR9576 and the P-gp substrates vinblastine and paclitaxel. 3 XR9576 was shown to be a potent modulator of P-gp mediated [3H]-vinblastine and [3H]-paclitaxel transport as it increased the steady-state accumulation of these cytotoxics in CHrB30 cells to levels



observed in non-P-gp-expressing AuxB1 cells ( $EC_{50} = 487 \pm 50$  nM). This inhibition of drug transport is not mediated through competition for transport since [ $^3H$ ]-XR9576 accumulation was not influenced by P-gp expression or function. 4 These results demonstrate that the P-gp modulator XR9576 exhibits greater selectivity, duration of inhibition and potency of interaction with this transporter than any other reported modulators. Several lines of evidence suggest that XR9576 inhibits P-gp function by binding at a site which is distinct from the site of interaction of transport substrates. The two sites may be classified as serving modulatory or transport functions.

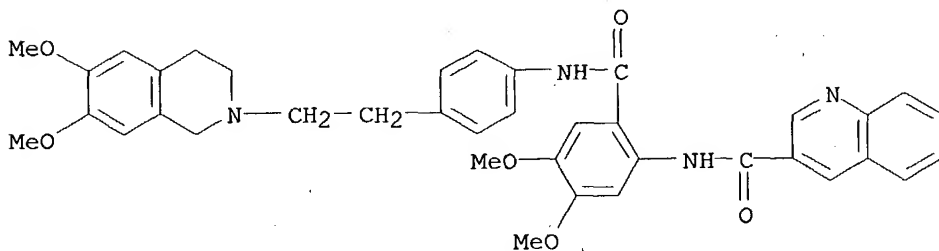
IT 206873-63-4, XR 9576

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(mol. interaction of high affinity reversal agent XR9576 with P-glycoprotein)

RN 206873-63-4 HCAPLUS

CN 3-Quinolinescarboxamide, N-[2-[[[4-[2-(3,4-dihydro-6,7-dimethoxy-2(1H)-isoquinolinyl)ethyl]phenyl]amino]carbonyl]-4,5-dimethoxyphenyl]- (9CI)  
(CA INDEX NAME)



RE.CNT 34 THERE ARE 34 CITED REFERENCES AVAILABLE FOR THIS RECORD  
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L10 ANSWER 7 OF 33 HCAPLUS COPYRIGHT 2004 ACS on STN

AN 1999:188605 HCAPLUS

DN 131:340

TI Reversal of P-glycoprotein mediated multidrug resistance by novel anthranilamide derivatives

AU Roe, Michael; Folkes, Adrian; Ashworth, Philip; Brumwell, Julie; Chima, Lal; Hunjan, Sukhjit; Pretswell, Ian; Dangerfield, Wendy; Ryder, Hamish; Charlton, Peter

CS Xenova Ltd., Slough, SL1 4EF, UK

SO Bioorganic & Medicinal Chemistry Letters (1999), 9(4), 595-600  
CODEN: BMCLE8; ISSN: 0960-894X

PB Elsevier Science Ltd.

DT Journal

LA English

AB We have synthesized and evaluated a series of anthranilamide based modulators of P-glycoprotein. These studies have identified XR9576, a potent inhibitor of P-glycoprotein in vitro and in vivo. The general synthesis and the SAR of these compds. are described.

IT 206872-35-7P 206873-60-1P 206873-61-2P

206873-62-3P 206873-63-4P 206873-65-6P

206873-66-7P 206873-68-9P 206873-69-0P

206873-71-4P 206873-73-6P 206873-74-7P



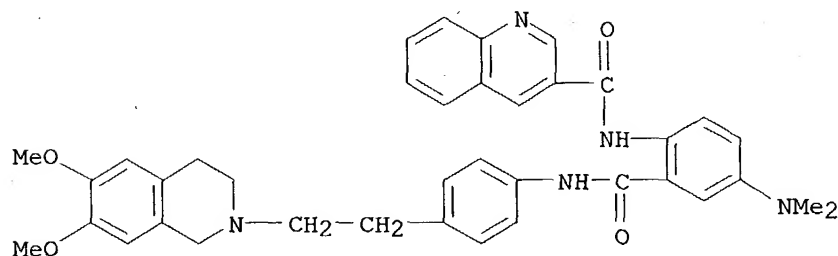
206873-78-1P 225938-12-5P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of novel anthranilamide derivs. for reversal of P-glycoprotein mediated multidrug resistance)

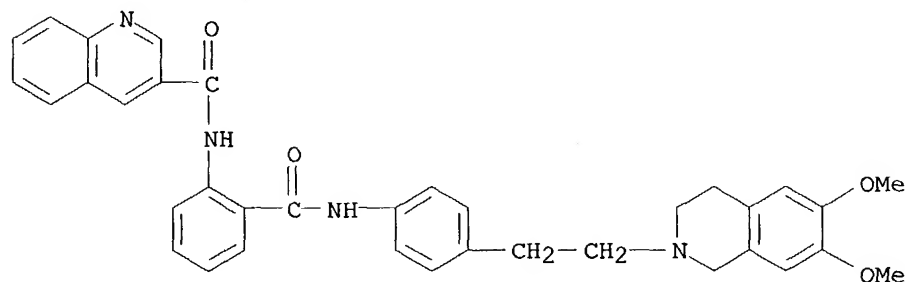
RN 206872-35-7 HCAPLUS

CN 3-Quinolinescarboxamide, N-[2-[[[4-[2-(3,4-dihydro-6,7-dimethoxy-2(1H)-  
isoquinolinyl)ethyl]phenyl]amino]carbonyl]-4-(dimethylamino)phenyl]- (9CI)  
(CA INDEX NAME)



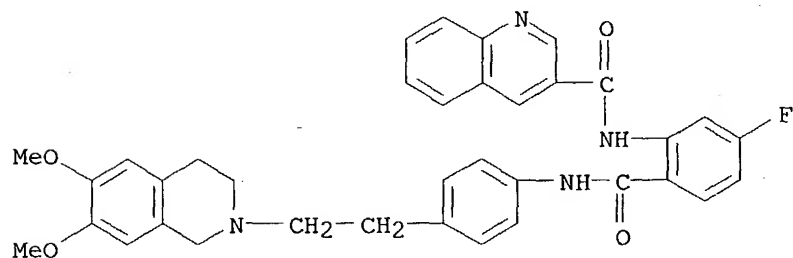
RN 206873-60-1 HCAPLUS

CN 3-Quinolinescarboxamide, N-[2-[[[4-[2-(3,4-dihydro-6,7-dimethoxy-2(1H)-isoquinolinyl)ethyl]phenyl]amino]carbonyl]phenyl]- (9CI) (CA INDEX NAME)



RN 206873-61-2 HCAPLUS

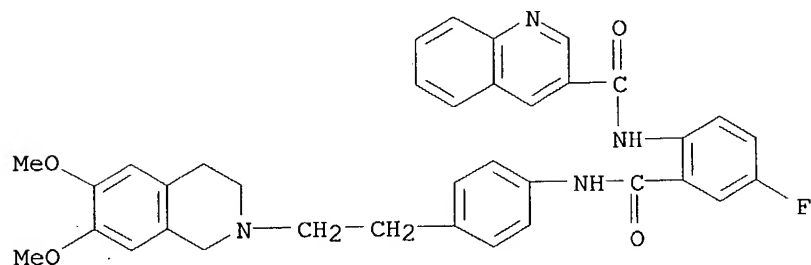
CN 3-Quinolinescarboxamide, N-[2-[[[4-[2-(3,4-dihydro-6,7-dimethoxy-2(1H)-  
isoquinolinyl)ethyl]phenyl]amino]carbonyl]-5-fluorophenyl]- (9CI) (CA  
INDEX NAME)



RN . 206873-62-3 HCAPLUS

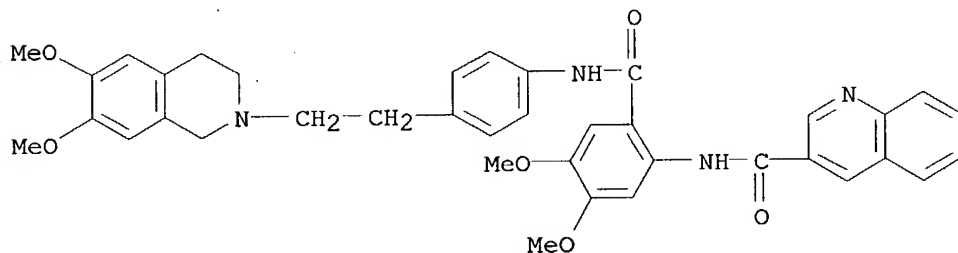


CN 3-Quinolinecarboxamide, N-[2-[[[4-[2-(3,4-dihydro-6,7-dimethoxy-2(1H)-isoquinolinyl)ethyl]phenyl]amino]carbonyl]-4-fluorophenyl]- (9CI) (CA INDEX NAME)



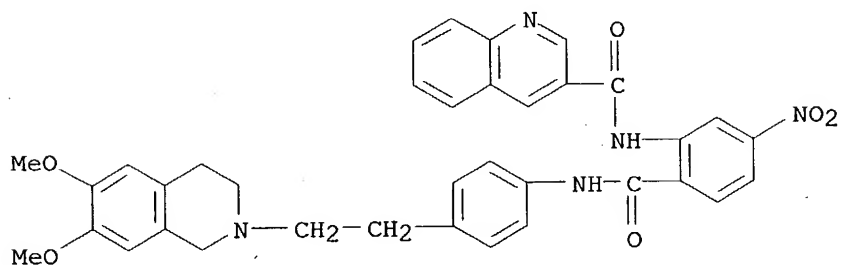
RN 206873-63-4 HCAPLUS

CN 3-Quinolinecarboxamide, N-[2-[[[4-[2-(3,4-dihydro-6,7-dimethoxy-2(1H)-isoquinolinyl)ethyl]phenyl]amino]carbonyl]-4,5-dimethoxyphenyl]- (9CI) (CA INDEX NAME)



RN 206873-65-6 HCAPLUS

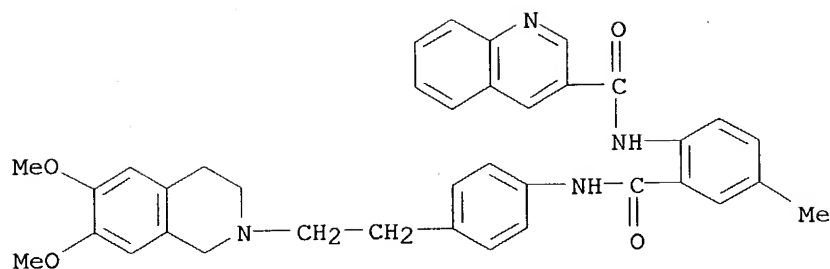
CN 3-Quinolinecarboxamide, N-[2-[[[4-[2-(3,4-dihydro-6,7-dimethoxy-2(1H)-isoquinolinyl)ethyl]phenyl]amino]carbonyl]-5-nitrophenyl]- (9CI) (CA INDEX NAME)



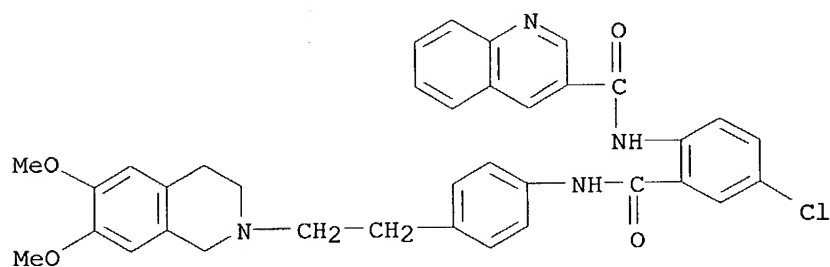
RN 206873-66-7 HCAPLUS

CN 3-Quinolinecarboxamide, N-[2-[[[4-[2-(3,4-dihydro-6,7-dimethoxy-2(1H)-isoquinolinyl)ethyl]phenyl]amino]carbonyl]-4-methylphenyl]- (9CI) (CA INDEX NAME)

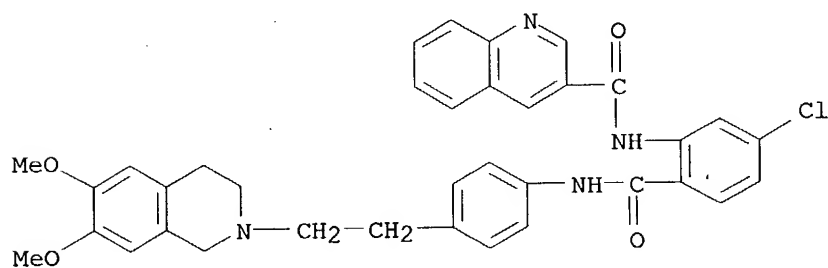




RN 206873-68-9 HCAPLUS  
 CN 3-Quinolinecarboxamide, N-[4-chloro-2-[[[4-[2-(3,4-dihydro-6,7-dimethoxy-2(1H)-isoquinolinyl)ethyl]phenyl]amino]carbonyl]phenyl]- (9CI) (CA INDEX NAME)

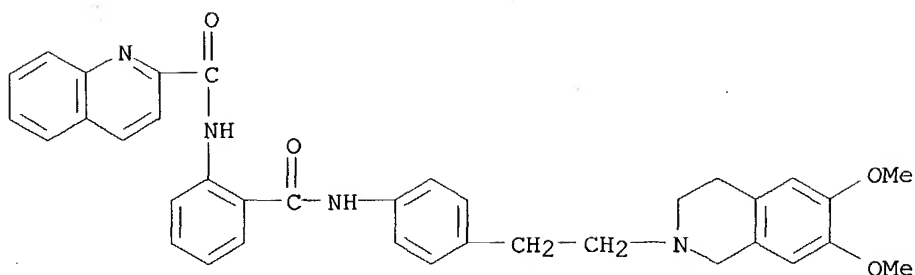


RN 206873-69-0 HCAPLUS  
 CN 3-Quinolinecarboxamide, N-[5-chloro-2-[[[4-[2-(3,4-dihydro-6,7-dimethoxy-2(1H)-isoquinolinyl)ethyl]phenyl]amino]carbonyl]phenyl]- (9CI) (CA INDEX NAME)



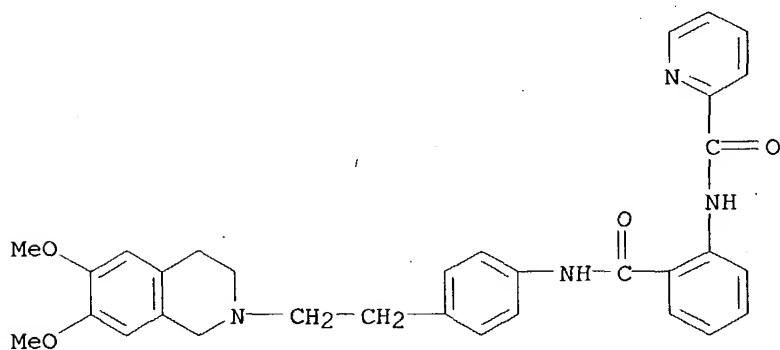
RN 206873-71-4 HCAPLUS  
 CN 2-Quinolinecarboxamide, N-[2-[[[4-[2-(3,4-dihydro-6,7-dimethoxy-2(1H)-isoquinolinyl)ethyl]phenyl]amino]carbonyl]phenyl]- (9CI) (CA INDEX NAME)





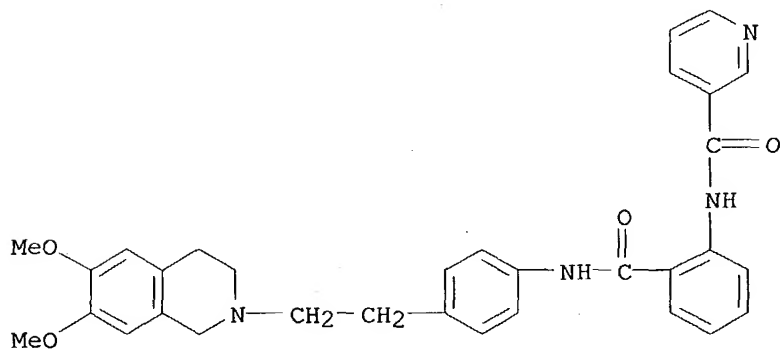
RN 206873-73-6 HCAPLUS

CN 2-Pyridinecarboxamide, N-[2-[[[4-[2-(3,4-dihydro-6,7-dimethoxy-2(1H)-isoquinolinyl)ethyl]phenyl]amino]carbonyl]phenyl]- (9CI) (CA INDEX NAME)



RN 206873-74-7 HCAPLUS

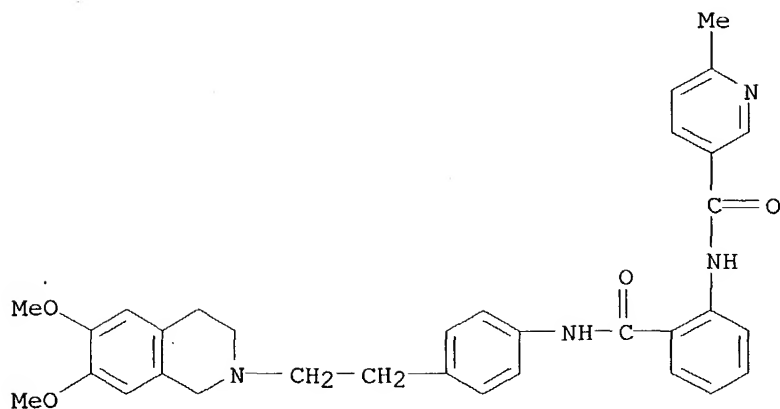
CN 3-Pyridinecarboxamide, N-[2-[[[4-[2-(3,4-dihydro-6,7-dimethoxy-2(1H)-isoquinolinyl)ethyl]phenyl]amino]carbonyl]phenyl]- (9CI) (CA INDEX NAME)



RN 206873-78-1 HCAPLUS

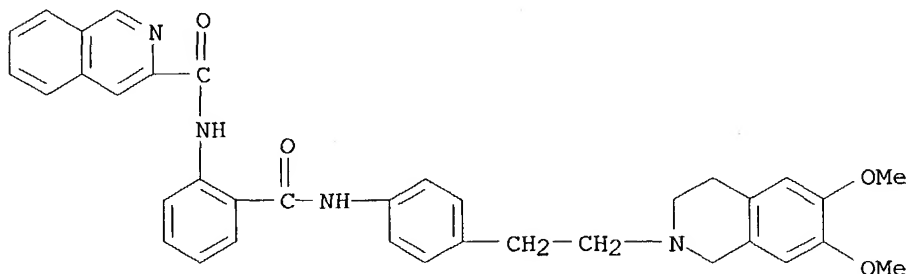
CN 3-Pyridinecarboxamide, N-[2-[[[4-[2-(3,4-dihydro-6,7-dimethoxy-2(1H)-isoquinolinyl)ethyl]phenyl]amino]carbonyl]phenyl]-6-methyl- (9CI) (CA INDEX NAME)





RN 225938-12-5 HCAPLUS

CN 3-Isoquinolinecarboxamide, N-[2-[[[4-[2-(3,4-dihydro-6,7-dimethoxy-2(1H)-isoquinolinyl)ethyl]phenyl]amino]carbonyl]phenyl]- (9CI) (CA INDEX NAME)



RE.CNT 12 THERE ARE 12 CITED REFERENCES AVAILABLE FOR THIS RECORD  
ALL CITATIONS AVAILABLE IN THE RE FORMAT '

L10 ANSWER 8 OF 33 HCAPLUS COPYRIGHT 2004 ACS on STN

AN 1999:42569 HCAPLUS

DN 130:95392

TI Preparation of bis-amides of 1,2-benzenediamines as antithrombotic agents  
IN Beight, Douglas Wade; Craft, Trelia Joyce; Franciskovich, Jeffry Bernard;  
Goodson, Theodore, Jr.; Hall, Steven Edward; Herron, David Kent;  
Klimkowski, Valentine Joseph; Kyle, Jeffrey Alan; Masters, John Joseph;  
Mendel, David; Milot, Guy; Sawyer, Jason Scott; Shuman, Robert Theodore;  
Smith, Gerald Floyd; Tebbe, Anne Louise; Tinsley, Jennifer Marie; Weir,  
Leonard Crayton; Wikel, James Howard; Wiley, Michael Robert; Yee, Ying  
Kwong

PA Eli Lilly and Company, USA

SO PCT Int. Appl., 311 pp.

CODEN: PIXXD2

DT Patent

LA English

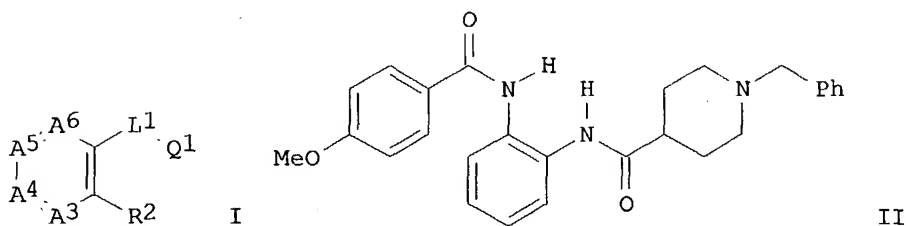
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 9900121	A1	19990107	WO 1998-US13427	19980626 <--
	W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE,				



DK, EE, ES, FI, GB, GE, GH, GM, GW, HU, ID, IL, IS, JP, KE, KG,  
 KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX,  
 NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT,  
 UA, UG, US, UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM  
 RW: GH, GM, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES,  
 FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI,  
 CM, GA, GN, ML, MR, NE, SN, TD, TG

AU 9882708 A1 19990119 AU 1998-82708 19980626 <--  
 EP 1014962 A1 20000705 EP 1998-932928 19980626  
 R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, PT, IE, FI  
 JP 2002512633 T2 20020423 JP 1999-505829 19980626  
 US 6313122 B1 20011106 US 2000-445972 20000320  
 US 2002120007 A1 20020829 US 2001-961164 20010921  
 US 6605626 B2 20030812  
 PRAI US 1997-50894P P 19970626  
 WO 1998-US13427 W 19980626  
 US 2000-445972 A3 20000320  
 OS MARPAT 130:95392  
 GI



AB The title compds. [I; A3-A6 together with the two carbons to which they are attached = (un)substituted benzene wherein A3 = CR3; A4 = CR4; A5 = CR5; A6 = CR6; R3 = H, OH, OCH2Ph, etc.; R4, R5 = H, Me, halo, etc.; R6 = H, F, OH, etc.; two adjacent residues selected from R3-R6 together form a benzene ring, and the other two are hydrogen; L1 = NHCO, OCO, CONH; Q1 = (un)substituted Ph, 2-furanyl, 2-thienyl, etc.; R2 = (un)substituted NHCOPh, OCOPh, CH2OPh, etc.], useful as inhibitors of factor Xa (no data), were prepared and formulated. Thus, treatment of N-benzylisonipecotate with oxalyl chloride in CH2Cl2 followed by addition of DMF, and subsequent addition of the resulting mixture into a solution of N1-(4-methoxybenzoyl)-1,2-benzenediamine and pyridine in CH2Cl2 and THF afforded 54% II. Compds. I are effective at 0.01-1000 mg/kg/day.

IT 219492-67-8P 219492-69-0P 219492-71-4P

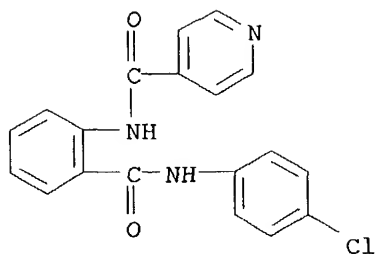
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(preparation of bis-amides of 1,2-benzenediamines as antithrombotic agents)

RN 219492-67-8 HCAPLUS

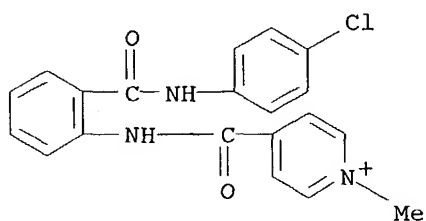
CN 4-Pyridinecarboxamide, N-[2-[[[(4-chlorophenyl)amino]carbonyl]phenyl]-  
 (9CI) (CA INDEX NAME)





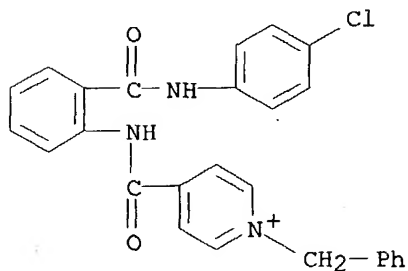
RN 219492-69-0 HCAPLUS

CN Pyridinium, 4-[[[2-[[[4-chlorophenyl]amino]carbonyl]phenyl]amino]carbonyl]-1-methyl-, iodide (9CI) (CA INDEX NAME)

● I<sup>-</sup>

RN 219492-71-4 HCAPLUS

CN Pyridinium, 4-[[[2-[[[4-chlorophenyl]amino]carbonyl]phenyl]amino]carbonyl]-1-(phenylmethyl)-, bromide (9CI) (CA INDEX NAME)

● Br<sup>-</sup>

RE.CNT 6 THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS RECORD  
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L10 ANSWER 9 OF 33 HCAPLUS COPYRIGHT 2004 ACS on STN

AN 1998:724208 HCAPLUS

DN 130:33033



TI Chromium picolinate complexes and pharmaceuticals with hypoglycemic or insulin-lowering effect

IN Kuroki, Yasuhisa

PA Otsuka Pharmaceutical Co., Ltd., Japan

SO Jpn. Kokai Tokkyo Koho, 8 pp.

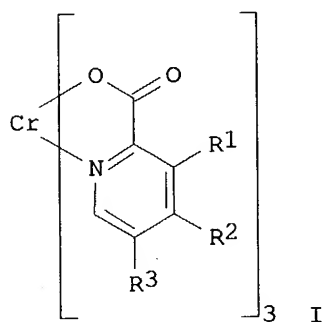
CODEN: JKXXAF

DT Patent

LA Japanese

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 10298189	A2	19981110	JP 1997-112682	19970430 <--
PRAI	JP 1997-112682		19970430		
OS	MARPAT 130:33033				
GI					



AB Hypoglycemic agents, their compns., or insulin-lowering compns. contain Cr complexes I [R1-R3 = H, lower alkyl, OH, benzoyl, lower alkoxy carbonyl, halo-substituted 3-(lower alkyl)-4(3H)-quinazolin-2-yl; R1 = R2 = R3 ≠ H] and optional carriers. 3-Hydroxypicolinic acid (4.17 g) was treated with 2.66 g CrCl<sub>3</sub>·6H<sub>2</sub>O in H<sub>2</sub>O at 80° for 5 h to give 1.67 g trans-I·1/2H<sub>2</sub>O (R1 = OH, R2 = R3 = H), which was orally administered to dexamethasone-treated rats to show 5% decrease of blood glucose (at 10 mg/kg dose) and 25% decrease of blood insulin (at 100 mg/kg dose). Formulation examples are given.

IT **216656-75-6P**

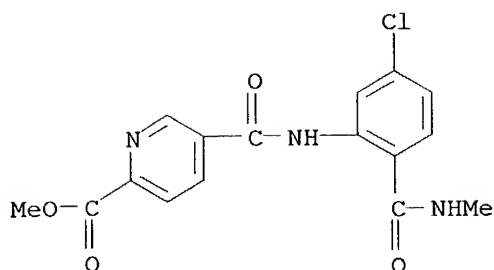
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(preparation of chromium picolinate complexes as hypoglycemic or insulin-lowering agents)

RN 216656-75-6 HCAPLUS

CN 2-Pyridinecarboxylic acid, 5-[[[5-chloro-2-[(methylamino)carbonyl]phenyl]amino]carbonyl]-, methyl ester (9CI) (CA INDEX NAME)

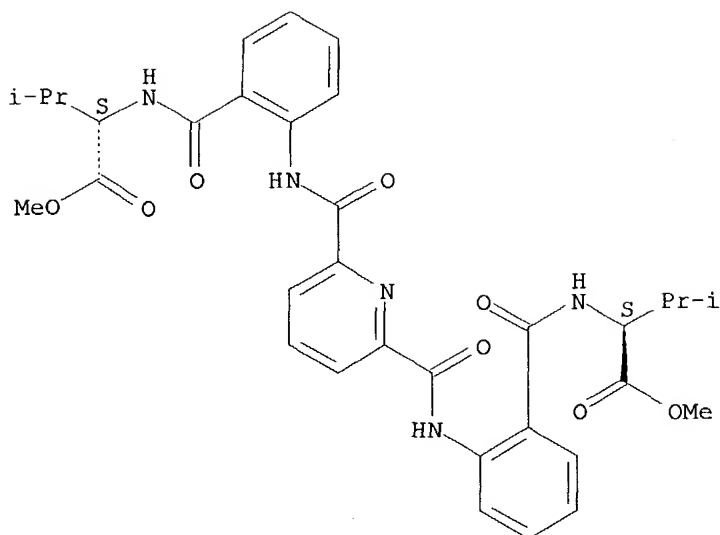




L10 ANSWER 10 OF 33 HCAPLUS COPYRIGHT 2004 ACS on STN  
 AN 1998:606819 HCAPLUS  
 DN 129:297543  
 TI Synthesis and structure of chiral 2,6-bis[(2-carbamoylphenyl)carbamoyl]pyridine ligands  
 AU Yu, Qiang; Baroni, Timothy E.; Liable-Sands, Louise; Rheingold, Arnold L.; Borovik, A. S.  
 CS Department of Chemistry, University of Kansas, Lawrence, KS, 66045, USA  
 SO Tetrahedron Letters (1998), 39(38), 6831-6834  
 CODEN: TELEAY; ISSN: 0040-4039  
 PB Elsevier Science Ltd.  
 DT Journal  
 LA English  
 AB The synthesis and structure of enantiomerically pure 2,6-bis[(2-carbamoylphenyl)carbamoyl]pyridine ligands are described. Appended from the aryl groups are optically active groups which provide a chiral environment around the planar pyridine core. NMR and x-ray diffraction studies show that these ligands contain helical character which is maintained by a network of intramol. H bonds. These ligands can bind metal ions through their tridentate diamidato-pyridyl chelate to form optically active metal complexes. A Ni complex is prepared and its x-ray crystal structure is determined. The modular design of these ligands offers a variety of chiral environments about the metal chelate that can be useful in the synthesis of metal reagents for asym. transformations.  
 IT **214203-39-1P**  
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)  
 (preparation and complexation with nickel)  
 RN 214203-39-1 HCAPLUS  
 CN L-Valine, N,N'-[2,6-pyridinediylbis(carbonylimino-2,1-phenylenecarbonyl)]bis-, dimethyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.





IT 214203-41-5P

RL: PRP (Properties); SPN (Synthetic preparation); PREP (Preparation)  
(preparation and crystal structure of)

RN 214203-41-5 HCAPLUS

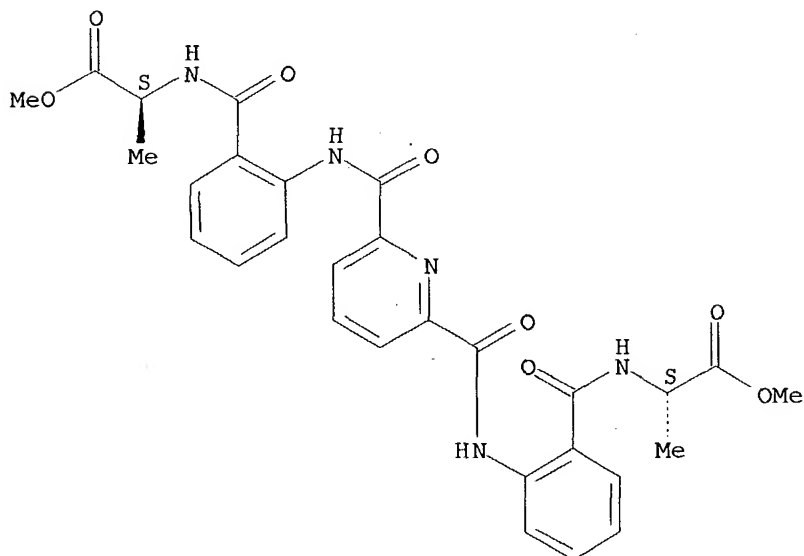
CN L-Alanine, N,N'-[2,6-pyridinediylbis(carbonylimino-2,1-phenylenecarbonyl)]bis-, dimethyl ester, compd. with dichloromethane (1:1)  
(9CI) (CA INDEX NAME)

CM 1

CRN 214203-38-0

CMF C29 H29 N5 O8

Absolute stereochemistry.





CM 2

CRN 75-09-2  
 CMF C H2 Cl2

Cl-CH<sub>2</sub>-Cl

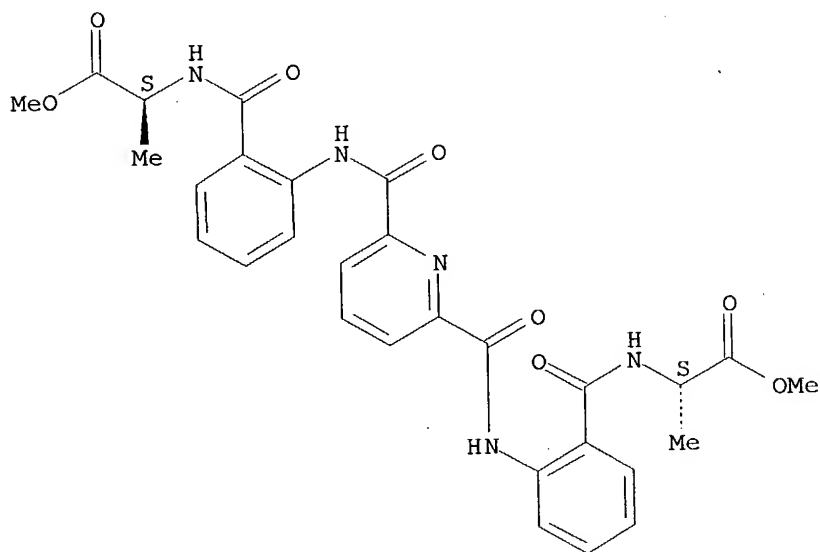
IT 214203-38-0P

RL: PRP (Properties); SPN (Synthetic preparation); PREP (Preparation)  
 (preparation and mol. structure of)

RN 214203-38-0 HCAPLUS

CN L-Alanine, N,N'-[2,6-pyridinediylbis(carbonylimino-2,1-phenylenecarbonyl)]bis-, dimethyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.



IT 214203-40-4P

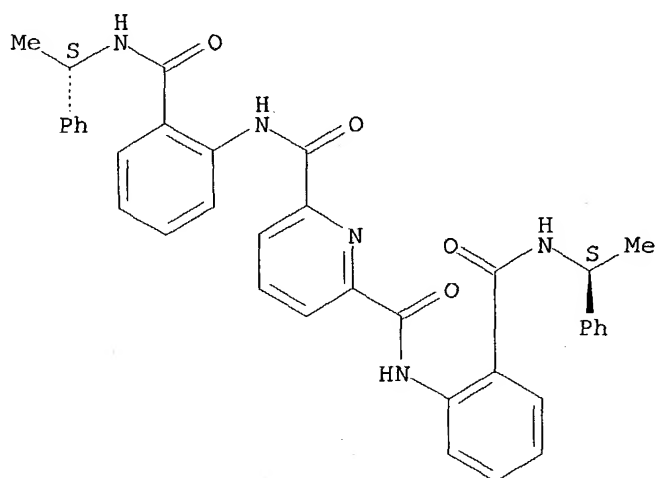
RL: SPN (Synthetic preparation); PREP (Preparation)  
 (preparation of)

RN 214203-40-4 HCAPLUS

CN 2,6-Pyridinedicarboxamide, N,N'-bis[2-[[[(1S)-1-phenylethyl]amino]carbonyl]phenyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.





RE.CNT 21 THERE ARE 21 CITED REFERENCES AVAILABLE FOR THIS RECORD  
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L10 ANSWER 11 OF 33 HCAPLUS COPYRIGHT 2004 ACS on STN

AN 1998:351844 HCAPLUS

DN 129:40989

TI Preparation of N-(2-oxoethyl)benzamides as cysteine protease inhibitors

IN Lubisch, Wilfried; Moeller, Achim; Treiber, Hans-Joerg

PA BASF A.-G., Germany

SO Ger. Offen., 34 pp.

CODEN: GWXXBX

DT Patent

LA German

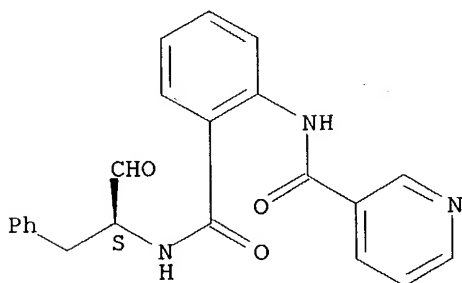
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	DE 19648793	A1	19980528	DE 1996-19648793	19961126 <--
	CA 2272388	AA	19980604	CA 1997-2272388	19971111 <--
	WO 9823581	A1	19980604	WO 1997-EP6292	19971111 <--
	W: AL, AU, BG, BR, BY, CA, CN, CZ, GE, HU, ID, IL, JP, KR, KZ, LT, LV, MX, NO, NZ, PL, RO, RU, SG, SI, SK, TR, UA, US, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
	RW: AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
	AU 9854814	A1	19980622	AU 1998-54814	19971111 <--
	AU 742262	B2	20011220		
	EP 944584	A1	19990929	EP 1997-951172	19971111 <--
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, PT, IE, SI, FI, RO				
	CN 1238761	A	19991215	CN 1997-180091	19971111 <--
	BR 9713147	A	20000208	BR 1997-13147	19971111 <--
	NZ 335542	A	20000728	NZ 1997-335542	19971111
	JP 2001506596	T2	20010522	JP 1998-524208	19971111
	RU 2189973	C2	20020927	RU 1999-113461	19971111
	ZA 9710569	A	19990525	ZA 1997-10569	19971125 <--
	TW 393454	B	20000611	TW 1997-86117691	19971125
	NO 9902492	A	19990525	NO 1999-2492	19990525 <--
	KR 2000057227	A	20000915	KR 1999-704582	19990525
	US 6251917	B1	20010626	US 1999-297916	19990526



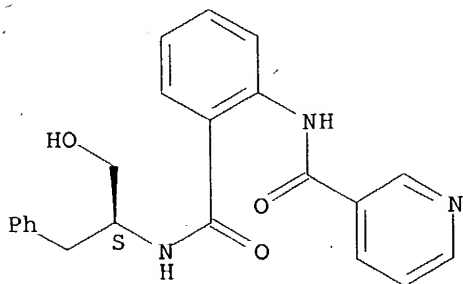
PRAI DE 1996-19648793 A 19961126  
 WO 1997-EP6292 W 19971111  
 OS MARPAT 129:40989  
 AB R1Z1Z2CONHCHR3CHO [R1 = (un)substituted (hetero)aryl; R3 = [(hetero)aryl] hydrocarbyl; Z1 = bond, O, CO, alkylene, etc.; Z2 = (un)substituted phenylene] were prepared Thus, 2-PhC6H4CO2H was amidated by (S)-PhCH2CH(NH2)CH2OH and the product oxidized to give (S)-2-PhC6H4CONHCH(CH2Ph)CHO (I). Data for biol. activity of I were given.  
 IT **208174-55-4P**  
 RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)  
 (preparation of N-(2-oxoethyl)benzamides as cysteine protease inhibitors)  
 RN 208174-55-4 HCAPLUS  
 CN 3-Pyridinecarboxamide, N-[2-[[[(1S)-1-formyl-2-phenylethyl]amino]carbonyl]phenyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



IT **208175-35-3P**  
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)  
 (preparation of N-(2-oxoethyl)benzamides as cysteine protease inhibitors)  
 RN 208175-35-3 HCAPLUS  
 CN 3-Pyridinecarboxamide, N-[2-[[[(1S)-1-(hydroxymethyl)-2-phenylethyl]amino]carbonyl]phenyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



L10 ANSWER 12 OF 33 HCAPLUS COPYRIGHT 2004 ACS on STN  
 AN 1998:268489 HCAPLUS  
 DN 128:321568



TI Anthranilic acid derivatives as multi drug resistance modulators  
 IN Ryder, Hamish; Ashworth, Philip Anthony; Roe, Michael John; Brumwell, Julie Elizabeth; Hunjan, Sukhjit; Folkes, Adrian John; Sanderson, Jason Terry; Williams, Susannah; Maximen, Levi Michael; et al.  
 PA Xenova Ltd., UK; Ryder, Hamish; Ashworth, Philip Anthony; Roe, Michael John; Brumwell, Julie Elizabeth; Hunjan, Sukhjit; Folkes, Adrian John; Sanderson, Jason Terry; Williams, Susannah; Maximen, Levi Michael  
 SO PCT Int. Appl., 203 pp.  
 CODEN: PIXXD2  
 DT Patent  
 LA English  
 FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI WO 9817648	A1	19980430	WO 1997-GB2885	19971017 <--
W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, GH, HU, ID, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG				
CA 2268403	AA	19980430	CA 1997-2268403	19971017 <--
AU 9746339	A1	19980515	AU 1997-46339	19971017 <--
AU 741922	B2	20011213		
ZA 9709329	A	19990419	ZA 1997-9329	19971017 <--
EP 934276	A1	19990811	EP 1997-945030	19971017 <--
EP 934276	B1	20031217		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI				
BR 9711935	A	19990824	BR 1997-11935	19971017 <--
GB 2334521	A1	19990825	GB 1999-8193	19971017 <--
GB 2334521	B2	20001004		
CN 1241181	A	20000112	CN 1997-180708	19971017 <--
JP 2001502683	T2	20010227	JP 1998-519108	19971017
RU 2195454	C2	20021227	RU 1999-109990	19971017
AT 256663	E	20040115	AT 1997-945030	19971017
ES 2210586	T3	20040701	ES 1997-945030	19971017
TW 498074	B	20020811	TW 1997-86115402	19971018
BG 103327	A	20001130	BG 1999-103327	19990413
NO 9901836	A	19990617	NO 1999-1836	19990416 <--
KR 2000049278	A	20000725	KR 1999-703389	19990417
US 6218393	B1	20010417	US 1999-284642	19990609
HK 1019330	A1	20010112	HK 1999-103773	19990901
PRAI WO 1996-GB2552	A	19961018		
GB 1997-17576	A	19970819		
WO 1997-GB2885	W	19971017		
OS MARPAT 128:321568				
GI				

\* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT \*

AB Anthranilic acid derivs. I [R, R1, R2 = H, alkyl, OH, alkoxy, halo, NO2, amino; or R1R2 = OCH2O or OCH2CH2O; R3 = H, alkyl; R4 = alkyl, or CH2 or



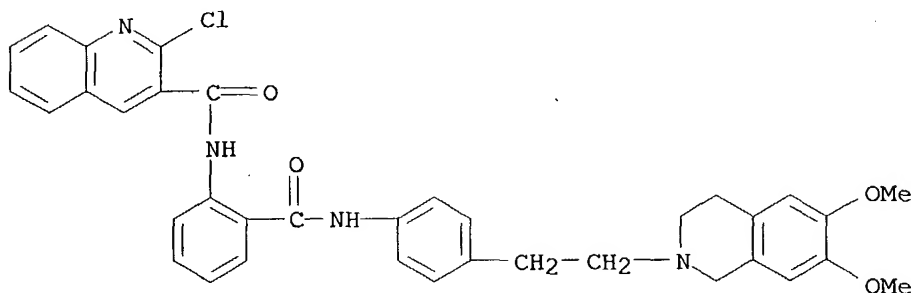
CH<sub>2</sub>CH<sub>2</sub> bridged to either Ph ring; R<sub>5</sub> = H, OH, alkyl; X = bond, O, S, S(CH<sub>2</sub>)<sub>p</sub>, O(CH<sub>2</sub>)<sub>p</sub>; p = 1-6; R<sub>6</sub> = H, alkyl, alkoxy; q = 0 or 1; Ar = (un)saturated carbo- or heterocyclic; R<sub>7</sub>, R<sub>8</sub> = H, (un)substituted alkyl, alkoxy, OH, halo, Ph, NHOH, NO<sub>2</sub>, amino, SH, alkylthio; or R<sub>7</sub>R<sub>8</sub> = CH:CHCH:CH or OCH<sub>2</sub>O; n = 0, 1; m = 0-6] and their pharmaceutically acceptable salts are disclosed. The compds. are inhibitors of P-glycoprotein, and may thus be used, inter alia, as modulators of multidrug resistance in the treatment of multidrug-resistant cancers, for example, to potentiate the cytotoxicity of a cancer drug. For instance, amidation of 3-quinolinecarboxylic acid with the corresponding aminothiophene derivative via the acid chloride gave title compound II in 44% yield. In a test for potentiation of doxorubicin toxicity to AR 1.0 cells, II had a potentiation index of 142 at 30 nM.

IT 206872-32-4P 206872-33-5P 206872-35-7P  
 206872-40-4P 206872-44-8P 206872-46-0P  
 206872-49-3P 206872-51-7P 206872-52-8P  
 206872-53-9P 206872-54-0P 206872-55-1P  
 206872-56-2P 206872-57-3P 206872-59-5P  
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 206873-75-8P 206873-78-1P 206873-79-2P  
 206874-31-9P 206874-33-1P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)  
 (preparation of anthranilic acid derivs. as multi-drug resistance modulators)

RN 206872-32-4 HCAPLUS

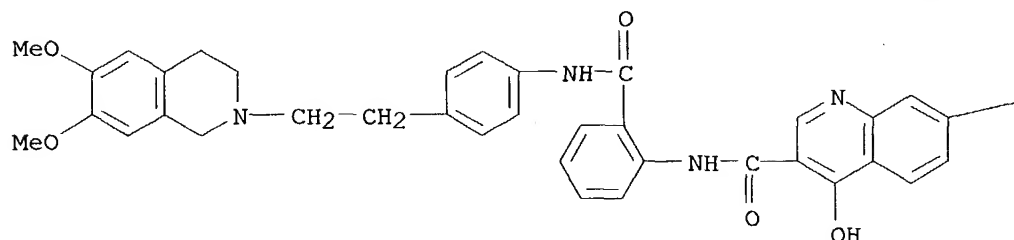
CN 3-Quinolinecarboxamide, 2-chloro-N-[2-[[[4-[2-(3,4-dihydro-6,7-dimethoxy-2(1H)-isoquinolinyl)ethyl]phenyl]amino]carbonyl]phenyl]- (9CI) (CA INDEX NAME)





RN 206872-33-5 HCAPLUS  
 CN 3-Quinolinecarboxamide, N-[2-[[[4-[2-(3,4-dihydro-6,7-dimethoxy-2(1H)-isoquinolinyl)ethyl]phenyl]amino]carbonyl]phenyl]-4-hydroxy-7-(trifluoromethyl)- (9CI) (CA INDEX NAME)

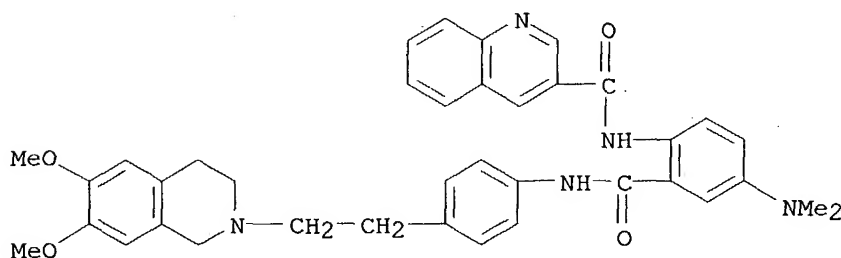
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PAGE 1-B

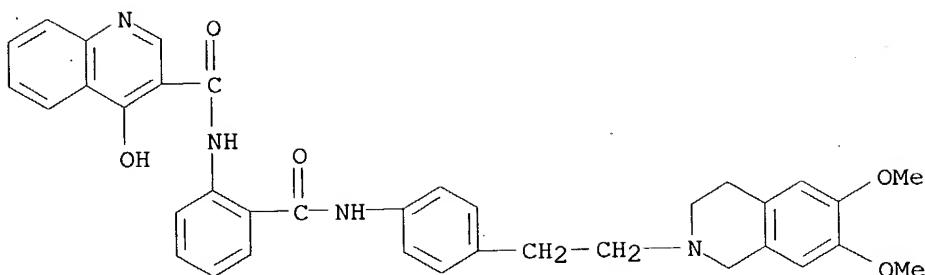
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RN 206872-35-7 HCAPLUS  
 CN 3-Quinolinecarboxamide, N-[2-[[[4-[2-(3,4-dihydro-6,7-dimethoxy-2(1H)-isoquinolinyl)ethyl]phenyl]amino]carbonyl]-4-(dimethylamino)phenyl]- (9CI) (CA INDEX NAME)

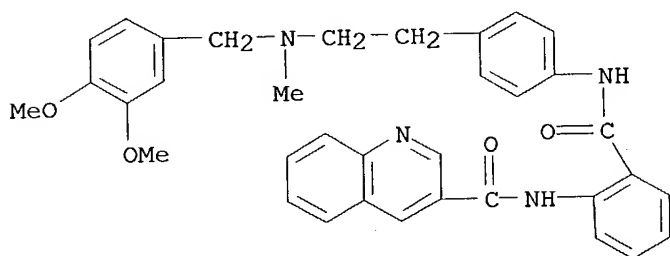


RN 206872-40-4 HCAPLUS  
 CN 3-Quinolinecarboxamide, N-[2-[[[4-[2-(3,4-dihydro-6,7-dimethoxy-2(1H)-isoquinolinyl)ethyl]phenyl]amino]carbonyl]phenyl]-4-hydroxy- (9CI) (CA INDEX NAME)

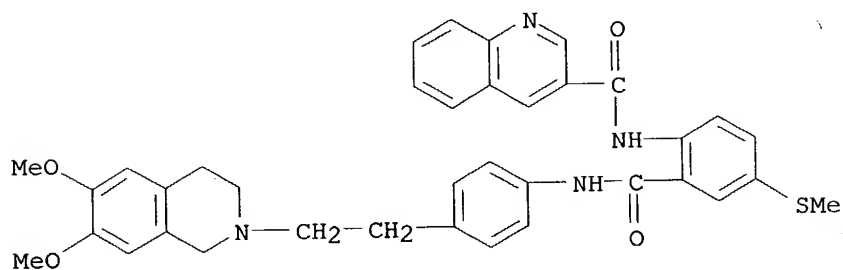




RN 206872-44-8 HCAPLUS  
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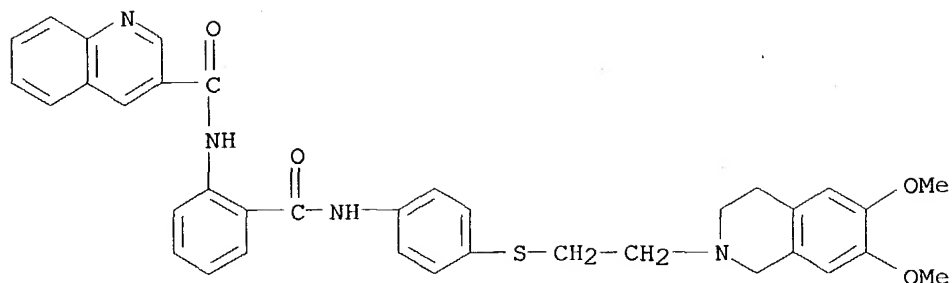


RN 206872-46-0 HCAPLUS  
 CN 3-Quinolinecarboxamide, N-[2-[[[4-[2-(3,4-dihydro-6,7-dimethoxy-2(1H)-isoquinolinyl)ethyl]phenyl]amino]carbonyl]-4-(methylthio)phenyl]- (9CI) (CA INDEX NAME)



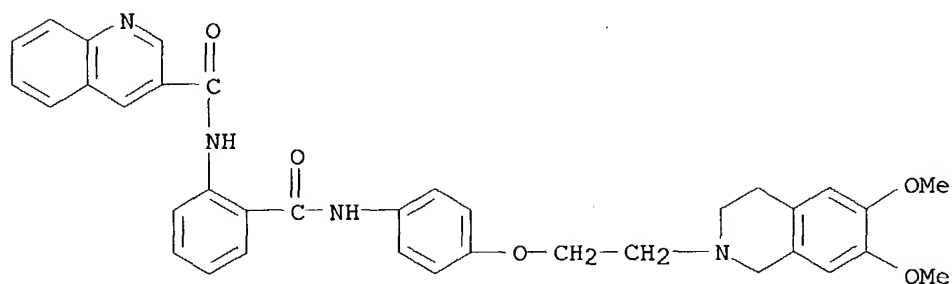
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 CN 3-Quinolinecarboxamide, N-[2-[[[4-[2-(3,4-dihydro-6,7-dimethoxy-2(1H)-isoquinolinyl)ethyl]thio]phenyl]amino]carbonyl]phenyl]- (9CI) (CA INDEX NAME)





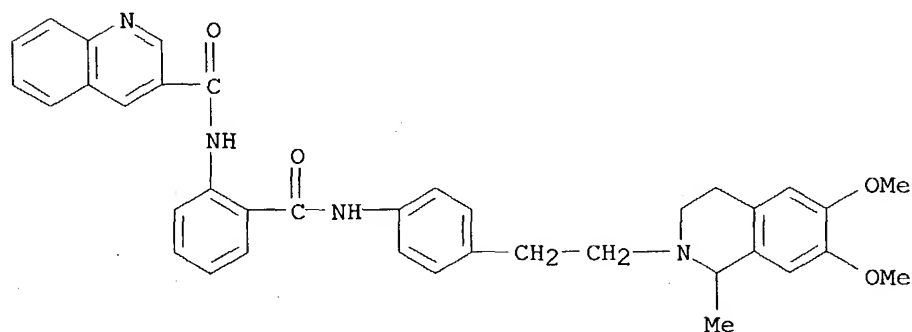
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CN 3-Quinolinecarboxamide, N-[2-[[[4-[2-(3,4-dihydro-6,7-dimethoxy-2(1H)-isoquinolinyl)ethoxy]phenyl]amino]carbonyl]phenyl]- (9CI) (CA INDEX NAME)



RN 206872-52-8 HCAPLUS

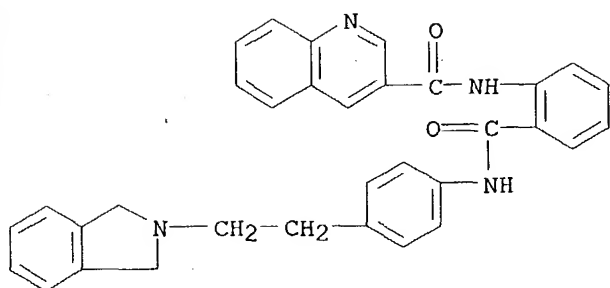
CN 3-Quinolinecarboxamide, N-[2-[[[4-[2-(3,4-dihydro-6,7-dimethoxy-1-methyl-2(1H)-isoquinolinyl)ethyl]phenyl]amino]carbonyl]phenyl]- (9CI) (CA INDEX NAME)



RN 206872-53-9 HCAPLUS

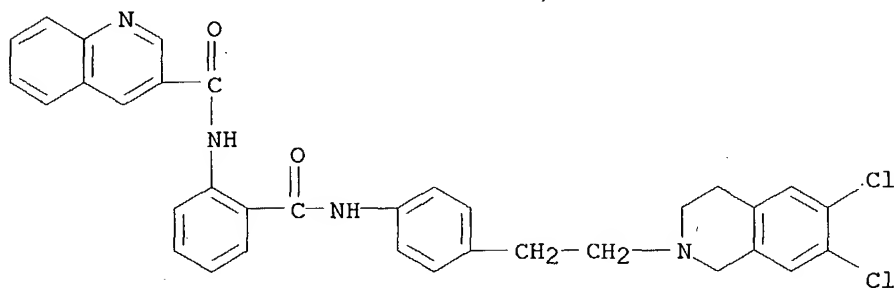
CN 3-Quinolinecarboxamide, N-[2-[[[4-[2-(1,3-dihydro-2H-isoindol-2-yl)ethyl]phenyl]amino]carbonyl]phenyl]- (9CI) (CA INDEX NAME)





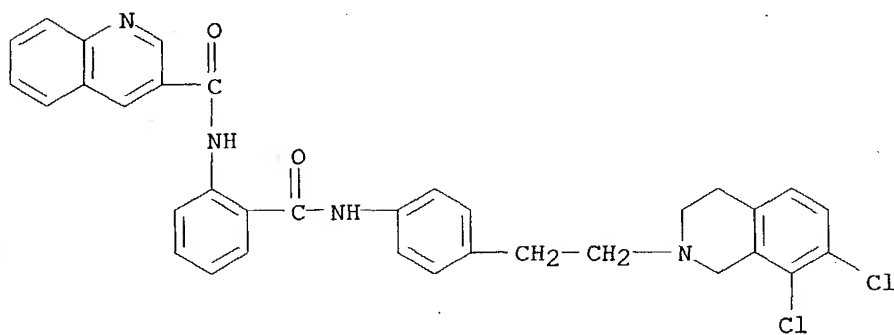
RN 206872-54-0 HCAPLUS

CN 3-Quinolinecarboxamide, N-[2-[[[4-[2-(6,7-dichloro-3,4-dihydro-2(1H)-isoquinolinyl)ethyl]phenyl]amino]carbonyl]phenyl]- (9CI) (CA INDEX NAME)



RN 206872-55-1 HCAPLUS

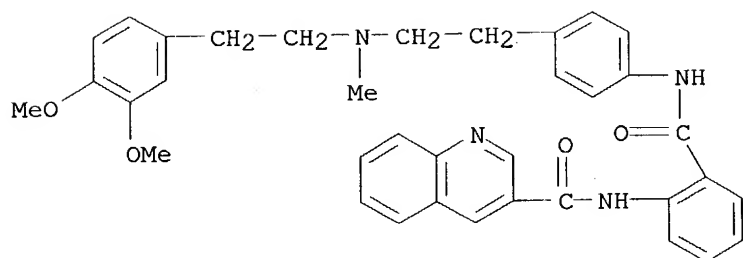
CN 3-Quinolinecarboxamide, N-[2-[[[4-[2-(7,8-dichloro-3,4-dihydro-2(1H)-isoquinolinyl)ethyl]phenyl]amino]carbonyl]phenyl]- (9CI) (CA INDEX NAME)



RN 206872-56-2 HCAPLUS

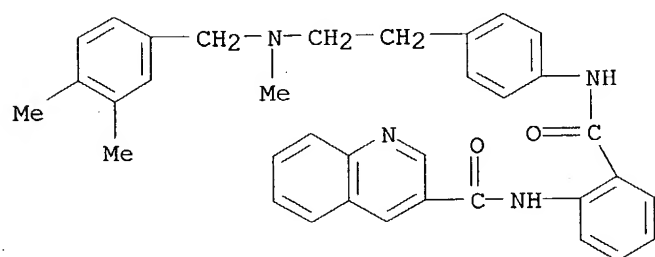
CN 3-Quinolinecarboxamide, N-[2-[[[4-[2-[[2-(3,4-dimethoxyphenyl)ethyl]methylamino]ethyl]phenyl]amino]carbonyl]phenyl]- (9CI) (CA INDEX NAME)





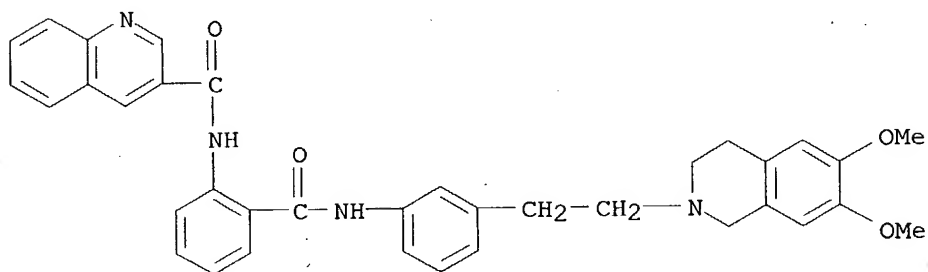
RN 206872-57-3 HCAPLUS

CN 3-Quinolinecarboxamide, N-[2-[[[4-[2-[(3,4-dimethylphenyl)methyl]methylamino]ethyl]phenyl]amino]carbonyl]phenyl]- (9CI) (CA INDEX NAME)



RN 206872-59-5 HCAPLUS

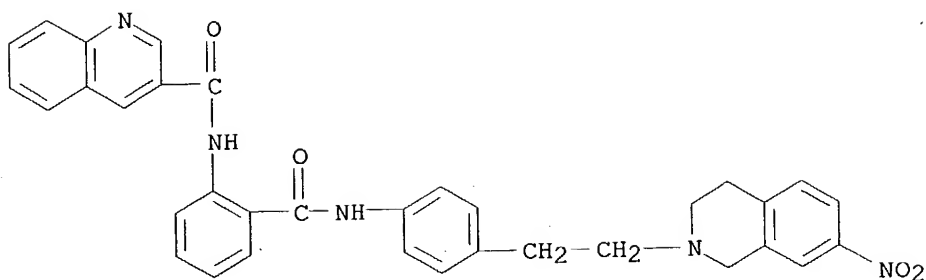
CN 3-Quinolinecarboxamide, N-[2-[[[3-[2-(3,4-dihydro-6,7-dimethoxy-2(1H)-isoquinolinyl)ethyl]phenyl]amino]carbonyl]phenyl]- (9CI) (CA INDEX NAME)



RN 206872-60-8 HCAPLUS

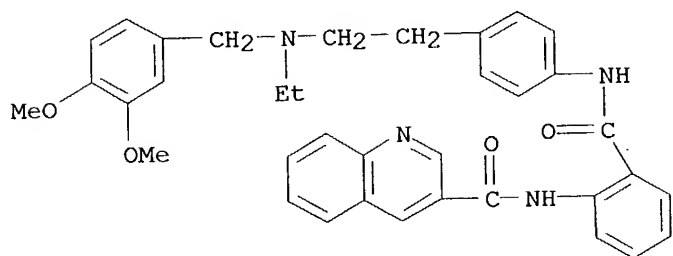
CN 3-Quinolinecarboxamide, N-[2-[[[4-[2-(3,4-dihydro-7-nitro-2(1H)-isoquinolinyl)ethyl]phenyl]amino]carbonyl]phenyl]- (9CI) (CA INDEX NAME)





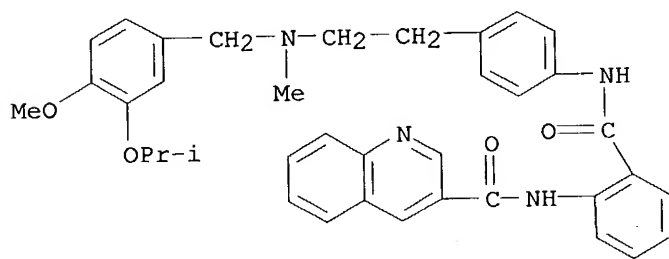
RN 206872-62-0 HCAPLUS

RN 206872-62-0 HCAPLUS  
CN 3-Quinolincarboxamide, N-[2-[[[4-[2-[[[3,4-dimethoxyphenyl)methyl]ethylamino]ethyl]phenyl]amino]carbonyl]phenyl]- (9CI) (CA INDEX NAME)



RN 206872-64-2 HCAPLUS

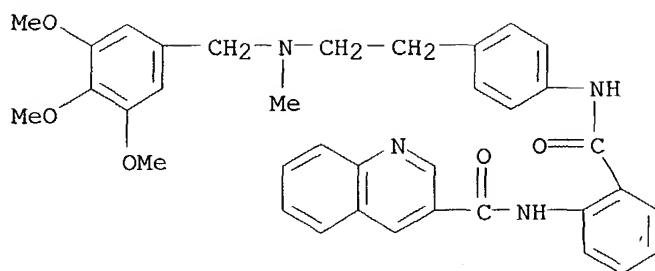
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CN 3-Quinolinescarboxamide, N-[2-[[[4-[2-[[[4-methoxy-3-(1-methylethoxy)phenyl]methyl]methylamino]ethyl]phenyl]amino]carbonyl]phenyl]-  
(9CI) (CA INDEX NAME)



RN 206872-65-3 HCAPLUS

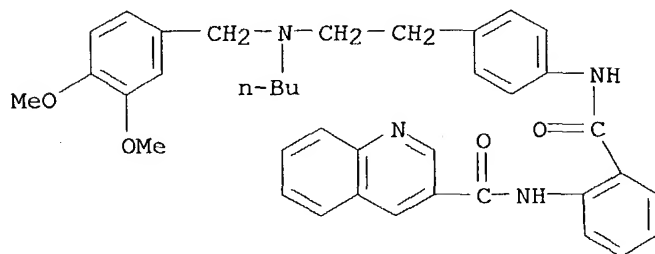
3-Quinolincarboxamide, N-[2-[[[4-[2-[methyl[(3,4,5-trimethoxyphenyl)methyl]amino]ethyl]phenyl]amino]carbonyl]phenyl]- (9CI)  
(CA INDEX NAME)





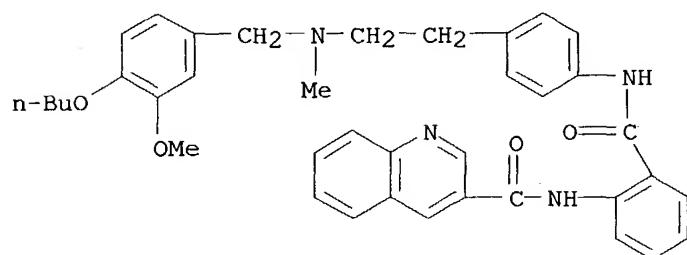
RN 206872-66-4 HCAPLUS

CN 3-Quinolinecarboxamide, N-[2-[[[4-[2-[butyl[(3,4-dimethoxyphenyl)methyl]amino]ethyl]phenyl]amino]carbonyl]phenyl]- (9CI)  
(CA INDEX NAME)



RN 206872-67-5 HCAPLUS

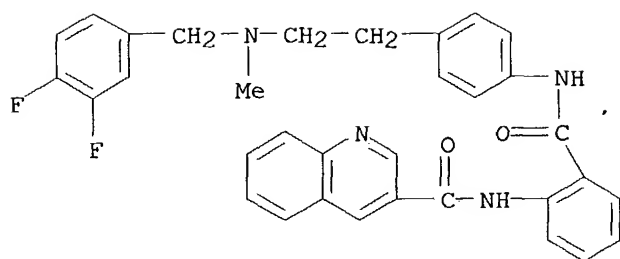
CN 3-Quinolinecarboxamide, N-[2-[[[4-[2-[[(4-butoxy-3-methoxyphenyl)methyl]methylanino]ethyl]phenyl]amino]carbonyl]phenyl]- (9CI) (CA INDEX NAME)



RN 206872-68-6 HCAPLUS

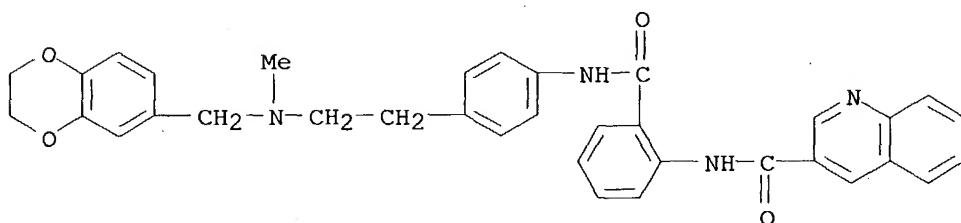
CN 3-Quinolinecarboxamide, N-[2-[[[4-[2-[[(3,4-difluorophenyl)methyl]methylanino]ethyl]phenyl]amino]carbonyl]phenyl]- (9CI) (CA INDEX NAME)





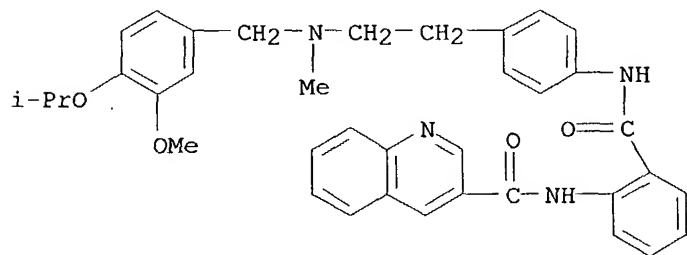
RN 206872-69-7 HCAPLUS

CN 3-Quinolinecarboxamide, N-[2-[[[4-[2-[[2,3-dihydro-1,4-benzodioxin-6-yl)methyl]methylamino]ethyl]phenyl]amino]carbonyl]phenyl]- (9CI) (CA INDEX NAME)



RN 206872-70-0 HCAPLUS

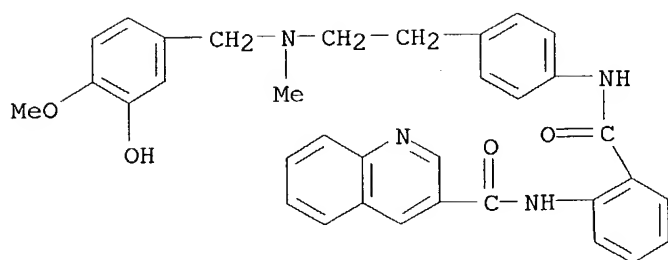
CN 3-Quinolinecarboxamide, N-[2-[[[4-[2-[[[3-methoxy-4-(1-methylethoxy)phenyl]methyl]methylamino]ethyl]phenyl]amino]carbonyl]phenyl]- (9CI) (CA INDEX NAME)



RN 206872-71-1 HCAPLUS

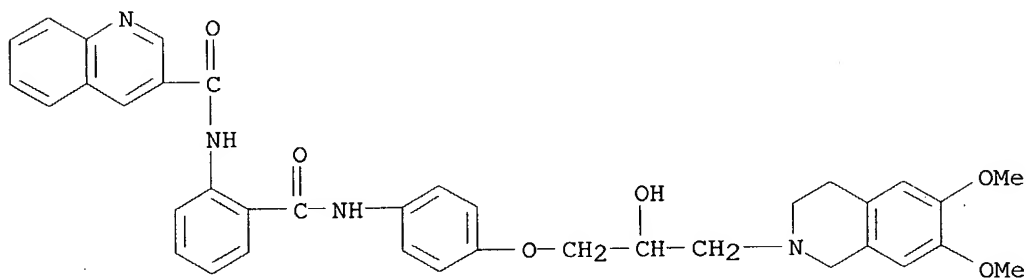
CN 3-Quinolinecarboxamide, N-[2-[[[4-[2-[[3-hydroxy-4-methoxyphenyl]methyl]methylamino]ethyl]phenyl]amino]carbonyl]phenyl]- (9CI) (CA INDEX NAME)





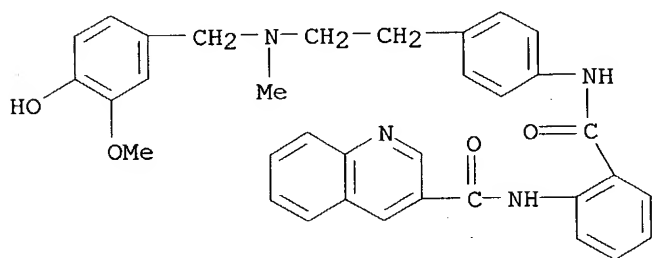
RN 206872-72-2 HCAPLUS

CN 3-Quinolinecarboxamide, N-[2-[[[4-[[3-(3,4-dihydro-6,7-dimethoxy-2(1H)-isoquinolinyl)-2-hydroxypropoxy]phenyl]amino]carbonyl]phenyl]- (9CI) (CA INDEX NAME)



RN 206872-73-3 HCAPLUS

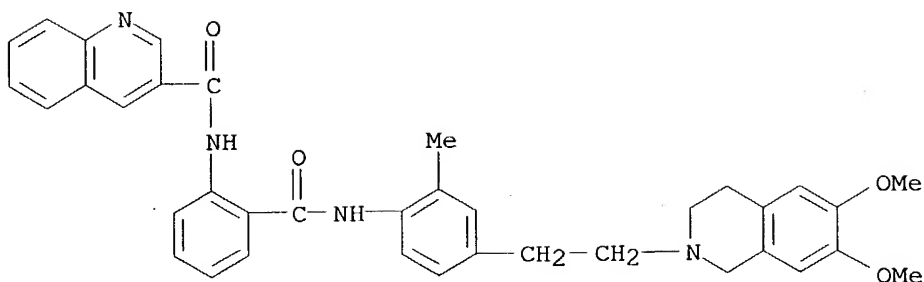
CN 3-Quinolinecarboxamide, N-[2-[[[4-[[2-[[[4-hydroxy-3-methoxyphenyl)methyl]methylamino]ethyl]phenyl]amino]carbonyl]phenyl]- (9CI) (CA INDEX NAME)



RN 206872-74-4 HCAPLUS

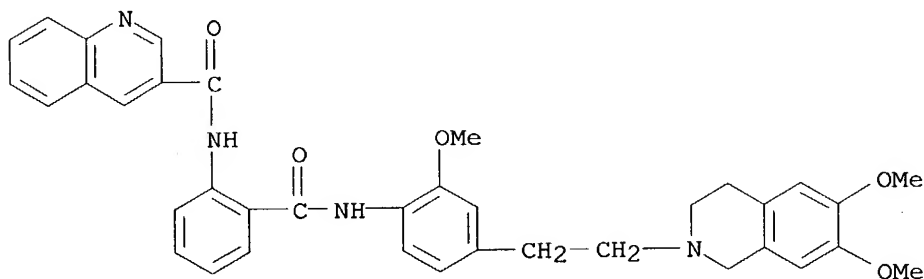
CN 3-Quinolinecarboxamide, N-[2-[[[4-[[2-(3,4-dihydro-6,7-dimethoxy-2(1H)-isoquinolinyl)ethyl]-2-methylphenyl]amino]carbonyl]phenyl]- (9CI) (CA INDEX NAME)





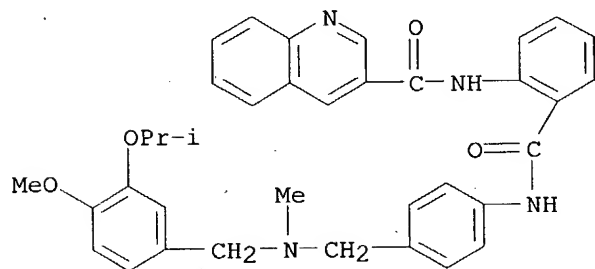
RN 206872-75-5 HCAPLUS

CN 3-Quinolinecarboxamide, N-[2-[[[4-[2-(3,4-dihydro-6,7-dimethoxy-2(1H)-isoquinolinyl)ethyl]-2-methoxyphenyl]amino]carbonyl]phenyl]- (9CI) (CA INDEX NAME)



RN 206872-76-6 HCAPLUS

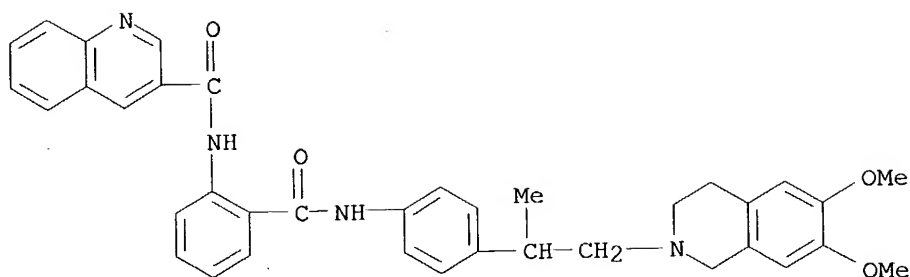
CN 3-Quinolinecarboxamide, N-[2-[[[4-[[[[4-methoxy-3-(1-methylethoxy)phenyl]methyl]methylamino]methyl]phenyl]amino]carbonyl]phenyl]- (9CI) (CA INDEX NAME)



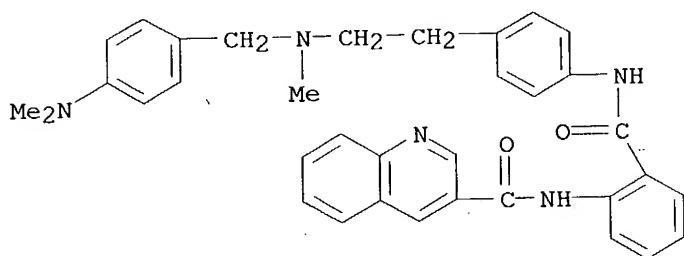
RN 206872-78-8 HCAPLUS

CN 3-Quinolinecarboxamide, N-[2-[[[4-[2-(3,4-dihydro-6,7-dimethoxy-2(1H)-isoquinolinyl)-1-methylethyl]phenyl]amino]carbonyl]phenyl]- (9CI) (CA INDEX NAME)

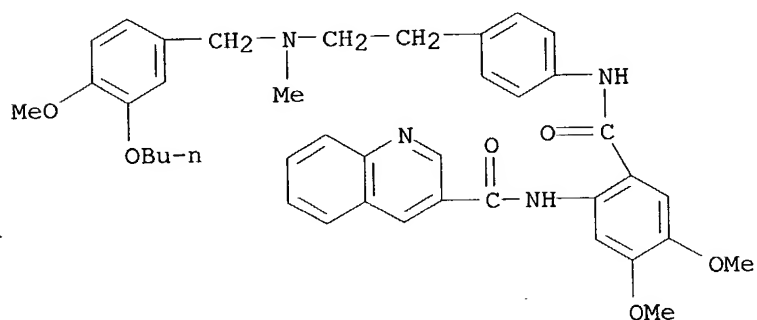




RN 206872-79-9 HCAPLUS  
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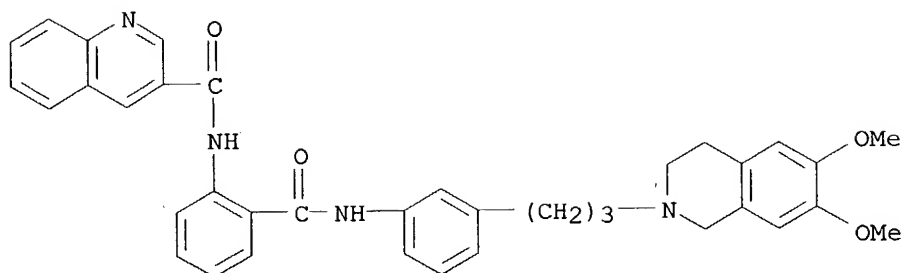


RN 206872-80-2 HCAPLUS  
 CN 3-Quinolinecarboxamide, N-[2-[[[4-[2-[[[3-butoxy-4-methoxyphenyl]methyl]methylamino]ethyl]phenyl]amino]carbonyl]-4,5-dimethoxyphenyl]- (9CI) (CA INDEX NAME)

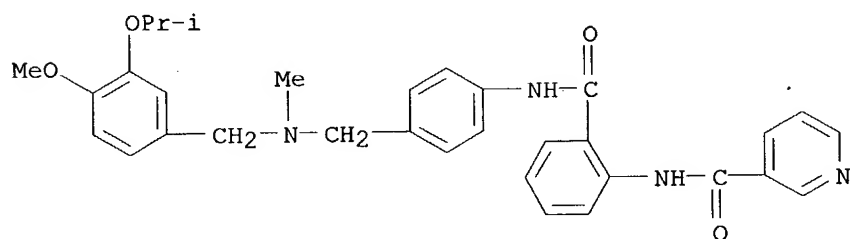


RN 206872-84-6 HCAPLUS  
 CN 3-Quinolinecarboxamide, N-[2-[[[3-[3-(3,4-dihydro-6,7-dimethoxy-2(1H)-isoquinolinyl)propyl]phenyl]amino]carbonyl]phenyl]- (9CI) (CA INDEX NAME)

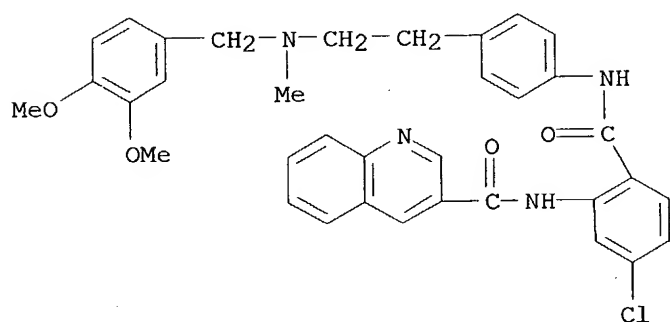




RN 206872-85-7 HCAPLUS  
 CN 3-Pyridinecarboxamide, N-[2-[[[4-[[[4-methoxy-3-(1-methylethoxy)phenyl]methyl]methylamino]methyl]phenyl]amino]carbonyl]phenyl]- (9CI) (CA INDEX NAME)

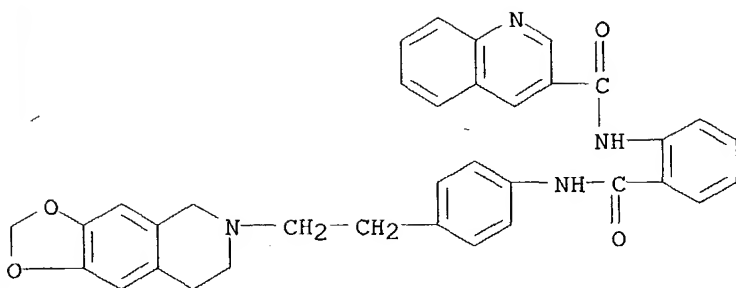


RN 206872-86-8 HCAPLUS  
 CN 3-Quinolinecarboxamide, N-[5-chloro-2-[[[4-[2-[[[3,4-dimethoxyphenyl]methyl]methylamino]ethyl]phenyl]amino]carbonyl]phenyl]- (9CI) (CA INDEX NAME)



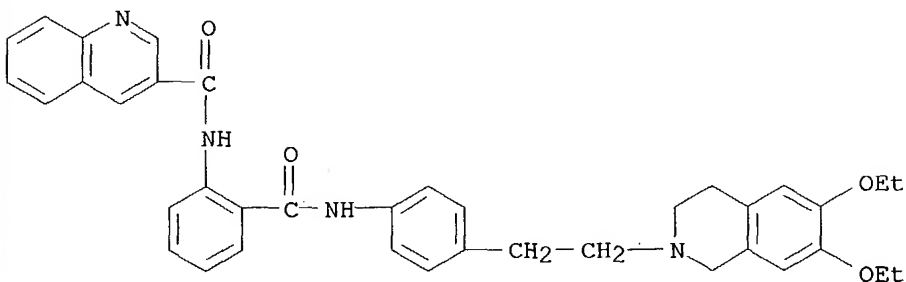
RN 206872-87-9 HCAPLUS  
 CN 3-Quinolinecarboxamide, N-[2-[[[4-[2-(7,8-dihydro-1,3-dioxolo[4,5-g]isoquinolin-6(5H)-yl)ethyl]phenyl]amino]carbonyl]phenyl]- (9CI) (CA INDEX NAME)





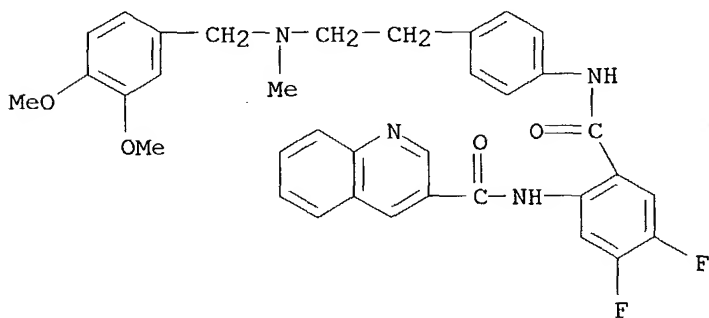
RN 206872-88-0 HCAPLUS

CN 3-Quinolinecarboxamide, N-[2-[[[4-[2-(6,7-diethoxy-3,4-dihydro-2(1H)-isoquinolinyl)ethyl]phenyl]amino]carbonyl]phenyl]- (9CI) (CA INDEX NAME)



RN 206872-90-4 HCAPLUS

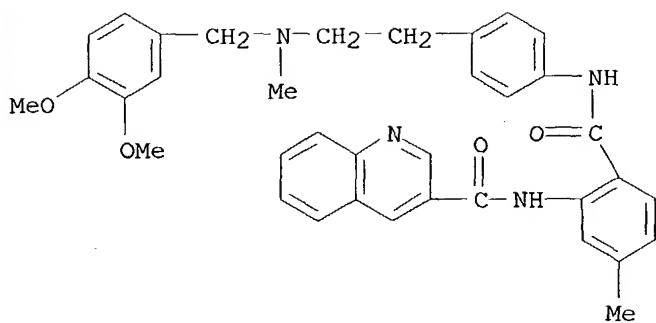
CN 3-Quinolinecarboxamide, N-[2-[[[4-[2-[(3,4-dimethoxyphenyl)methyl]methylamino]ethyl]phenyl]amino]carbonyl]-4,5-difluorophenyl]- (9CI) (CA INDEX NAME)



RN 206872-91-5 HCAPLUS

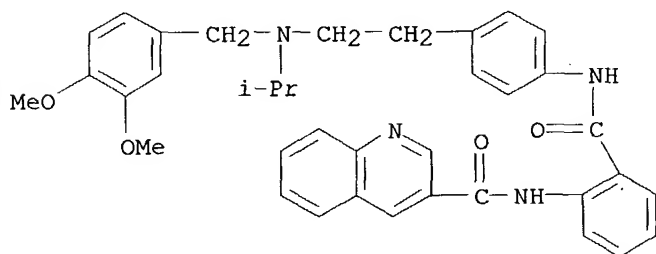
CN 3-Quinolinecarboxamide, N-[2-[[[4-[2-[(3,4-dimethoxyphenyl)methyl]methylamino]ethyl]phenyl]amino]carbonyl]-5-methylphenyl]- (9CI) (CA INDEX NAME)





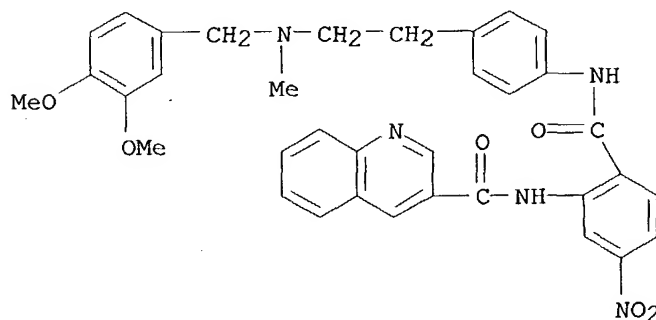
RN 206872-92-6 HCAPLUS

CN 3-Quinolinecarboxamide, N-[2-[[[4-[2-[(3,4-dimethoxyphenyl)methyl](1-methylethyl)amino]ethyl]phenyl]amino]carbonyl]phenyl]- (9CI) (CA INDEX NAME)



RN 206872-93-7 HCAPLUS

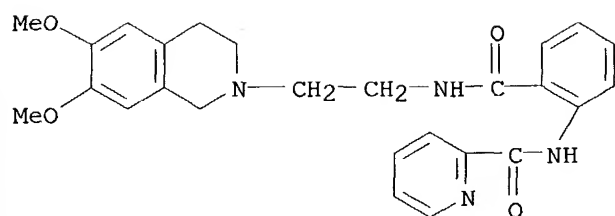
CN 3-Quinolinecarboxamide, N-[2-[[[4-[2-[(3,4-dimethoxyphenyl)methyl]methylamino]ethyl]phenyl]amino]carbonyl]-5-nitrophenyl]- (9CI) (CA INDEX NAME)



RN 206873-39-4 HCAPLUS

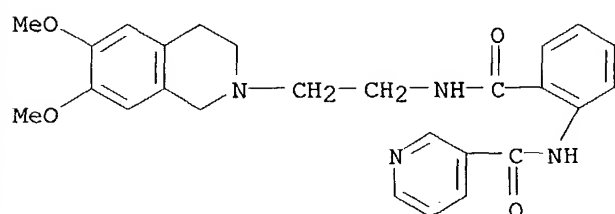
CN 2-Pyridinecarboxamide, N-[2-[[[2-(3,4-dihydro-6,7-dimethoxy-2(1H)-isoquinolinyl)ethyl]amino]carbonyl]phenyl]- (9CI) (CA INDEX NAME)





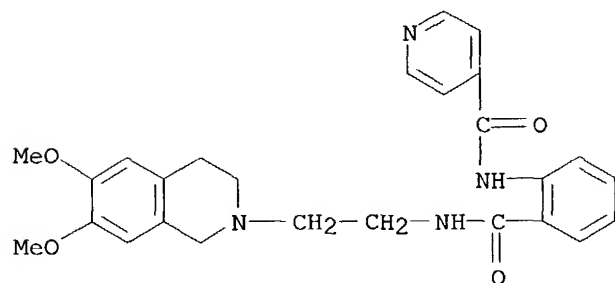
RN 206873-40-7 HCAPLUS

CN 3-Pyridinecarboxamide, N-[2-[[[2-(3,4-dihydro-6,7-dimethoxy-2(1H)-isoquinolinyl)ethyl]amino]carbonyl]phenyl]- (9CI) (CA INDEX NAME)



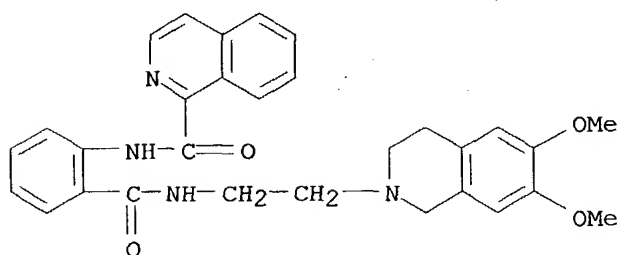
RN 206873-41-8 HCAPLUS

CN 4-Pyridinecarboxamide, N-[2-[[[2-(3,4-dihydro-6,7-dimethoxy-2(1H)-isoquinolinyl)ethyl]amino]carbonyl]phenyl]- (9CI) (CA INDEX NAME)



RN 206873-44-1 HCAPLUS

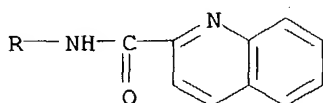
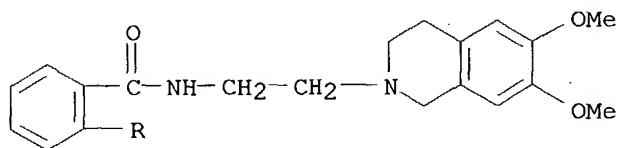
CN 1-Isoquinolinecarboxamide, N-[2-[[[2-(3,4-dihydro-6,7-dimethoxy-2(1H)-isoquinolinyl)ethyl]amino]carbonyl]phenyl]- (9CI) (CA INDEX NAME)





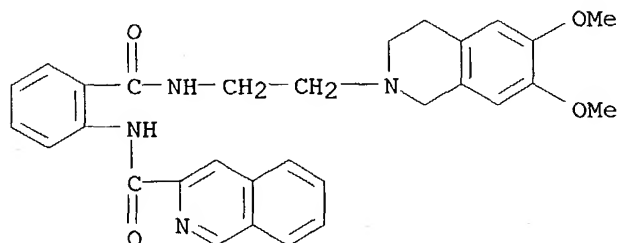
RN 206873-45-2 HCAPLUS

CN 2-Quinolinecarboxamide, N-[2-[[[2-(3,4-dihydro-6,7-dimethoxy-2(1H)-isoquinolinyl)ethyl]amino]carbonyl]phenyl]- (9CI) (CA INDEX NAME)



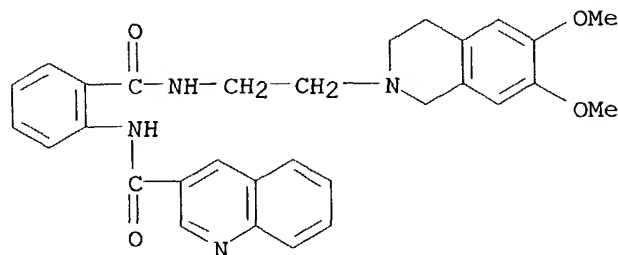
RN 206873-46-3 HCAPLUS

CN 3-Isoquinolinecarboxamide, N-[2-[[[2-(3,4-dihydro-6,7-dimethoxy-2(1H)-isoquinolinyl)ethyl]amino]carbonyl]phenyl]- (9CI) (CA INDEX NAME)



RN 206873-47-4 HCAPLUS

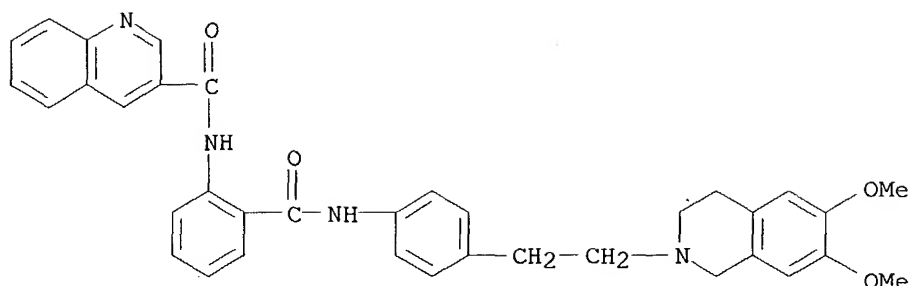
CN 3-Quinolinecarboxamide, N-[2-[[[2-(3,4-dihydro-6,7-dimethoxy-2(1H)-isoquinolinyl)ethyl]amino]carbonyl]phenyl]- (9CI) (CA INDEX NAME)



RN 206873-60-1 HCAPLUS

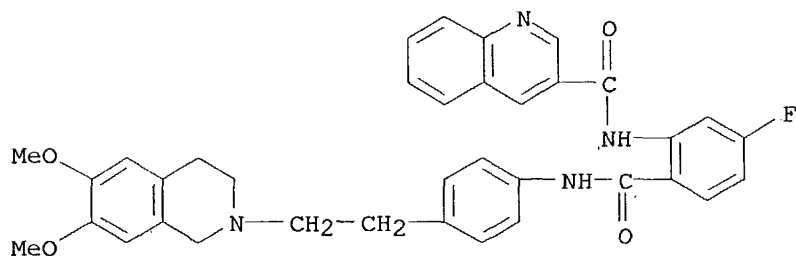
CN 3-Quinolinecarboxamide, N-[2-[[[4-[2-(3,4-dihydro-6,7-dimethoxy-2(1H)-isoquinolinyl)ethyl]phenyl]amino]carbonyl]phenyl]- (9CI) (CA INDEX NAME)





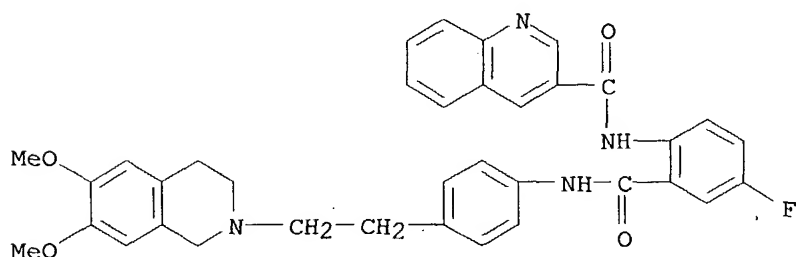
RN 206873-61-2 HCAPLUS

CN 3-Quinolinecarboxamide, N-[2-[[[4-[2-(3,4-dihydro-6,7-dimethoxy-2(1H)-isoquinolinyl)ethyl]phenyl]amino]carbonyl]-5-fluorophenyl]- (9CI) (CA INDEX NAME)



RN 206873-62-3 HCAPLUS

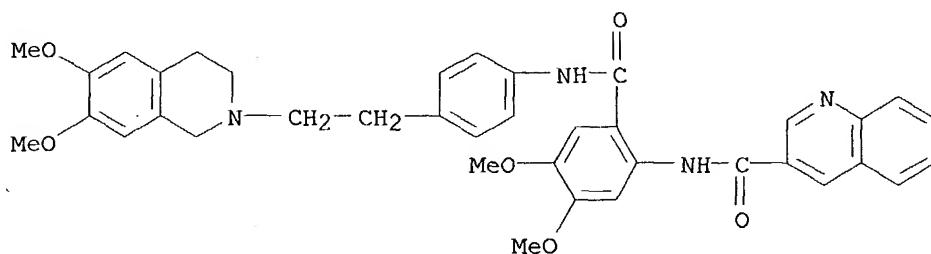
CN 3-Quinolinecarboxamide, N-[2-[[[4-[2-(3,4-dihydro-6,7-dimethoxy-2(1H)-isoquinolinyl)ethyl]phenyl]amino]carbonyl]-4-fluorophenyl]- (9CI) (CA INDEX NAME)



RN 206873-63-4 HCAPLUS

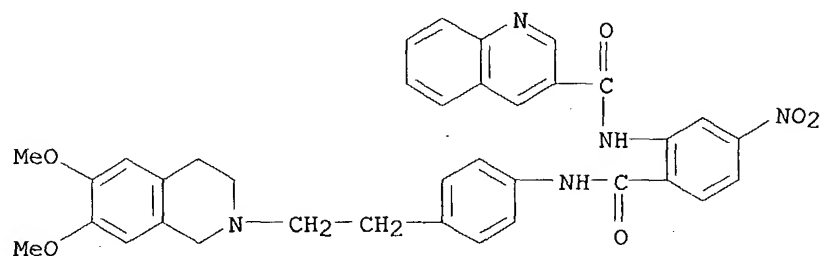
CN 3-Quinolinecarboxamide, N-[2-[[[4-[2-(3,4-dihydro-6,7-dimethoxy-2(1H)-isoquinolinyl)ethyl]phenyl]amino]carbonyl]-4,5-dimethoxyphenyl]- (9CI) (CA INDEX NAME)





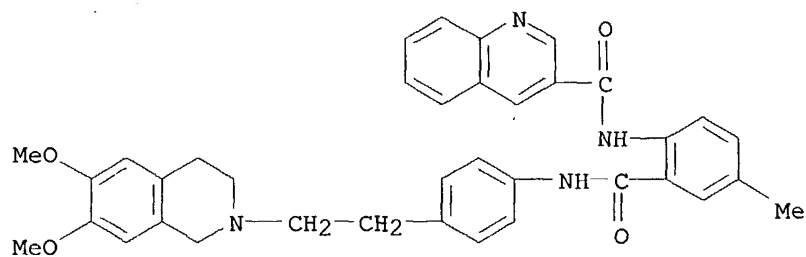
RN 206873-65-6 HCAPLUS

CN 3-Quinolinecarboxamide, N-[2-[[[4-[2-(3,4-dihydro-6,7-dimethoxy-2(1H)-isoquinolinyl)ethyl]phenyl]amino]carbonyl]-5-nitrophenyl]- (9CI) (CA INDEX NAME)



RN 206873-66-7 HCAPLUS

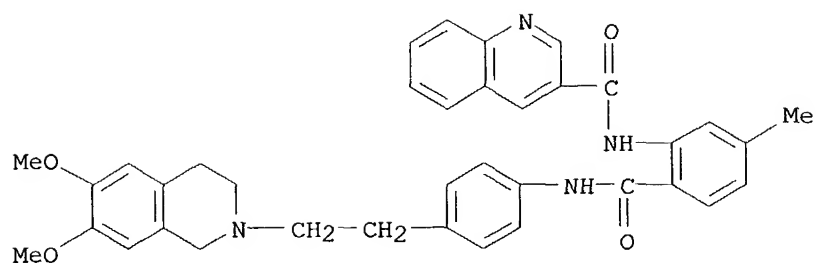
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RN 206873-67-8 HCAPLUS

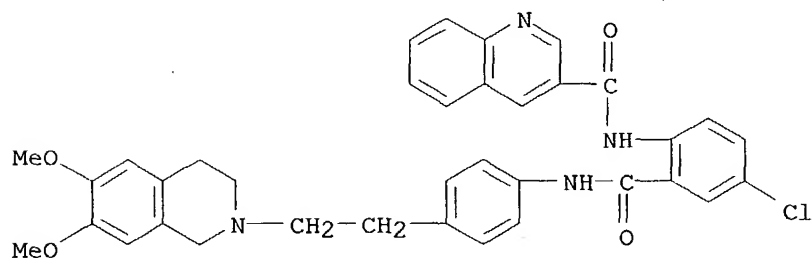
CN 3-Quinolinecarboxamide, N-[2-[[[4-[2-(3,4-dihydro-6,7-dimethoxy-2(1H)-isoquinolinyl)ethyl]phenyl]amino]carbonyl]-5-methylphenyl]- (9CI) (CA INDEX NAME)





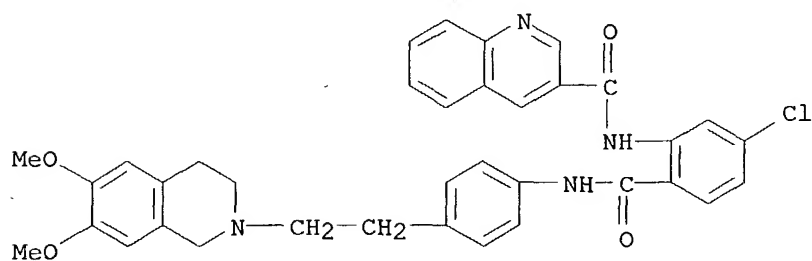
RN 206873-68-9 HCAPLUS

CN 3-Quinolinecarboxamide, N-[4-chloro-2-[[[4-[2-(3,4-dihydro-6,7-dimethoxy-2(1H)-isoquinolinyl)ethyl]phenyl]amino]carbonyl]phenyl]- (9CI) (CA INDEX NAME)



RN 206873-69-0 HCAPLUS

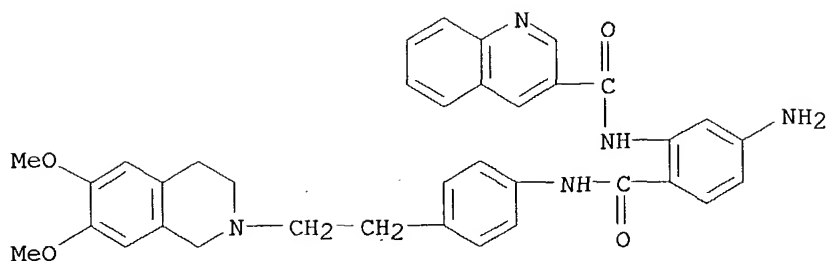
CN 3-Quinolinecarboxamide, N-[5-chloro-2-[[[4-[2-(3,4-dihydro-6,7-dimethoxy-2(1H)-isoquinolinyl)ethyl]phenyl]amino]carbonyl]phenyl]- (9CI) (CA INDEX NAME)



RN 206873-70-3 HCAPLUS

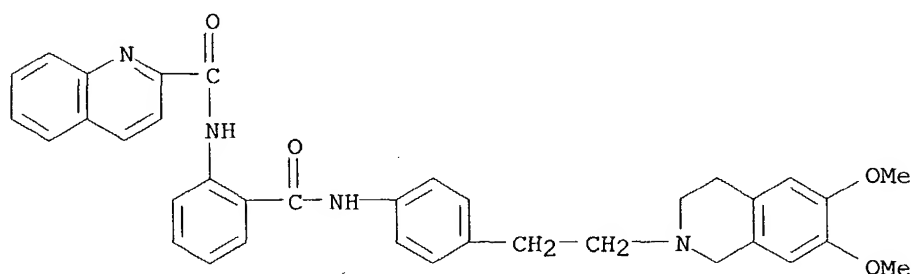
CN 3-Quinolinecarboxamide, N-[5-amino-2-[[[4-[2-(3,4-dihydro-6,7-dimethoxy-2(1H)-isoquinolinyl)ethyl]phenyl]amino]carbonyl]phenyl]- (9CI) (CA INDEX NAME)





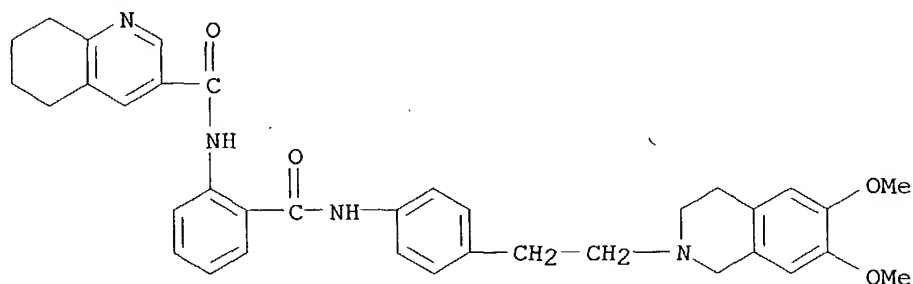
RN 206873-71-4 HCAPLUS

CN 2-Quinolinecarboxamide, N-[2-[[[4-[2-(3,4-dihydro-6,7-dimethoxy-2(1H)-isoquinolinyl)ethyl]phenyl]amino]carbonyl]phenyl]- (9CI) (CA INDEX NAME)



RN 206873-72-5 HCAPLUS

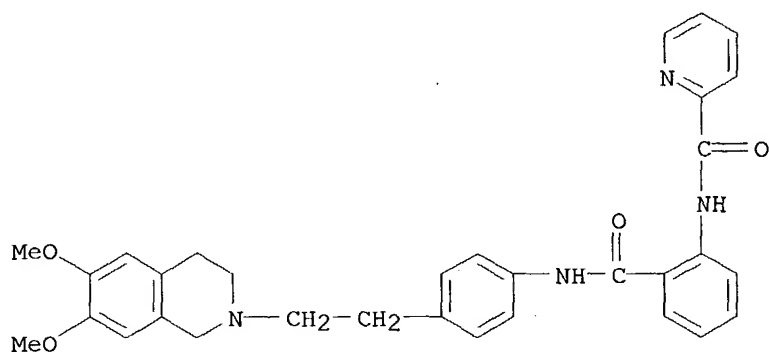
CN 3-Quinolinecarboxamide, N-[2-[[[4-[2-(3,4-dihydro-6,7-dimethoxy-2(1H)-isoquinolinyl)ethyl]phenyl]amino]carbonyl]phenyl]-5,6,7,8-tetrahydro- (9CI) (CA INDEX NAME)



RN 206873-73-6 HCAPLUS

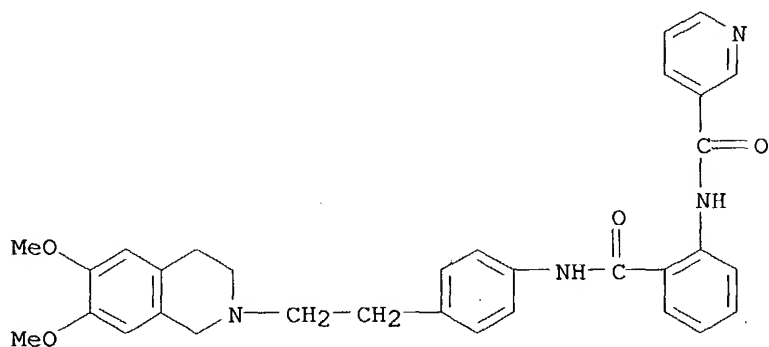
CN 2-Pyridinecarboxamide, N-[2-[[[4-[2-(3,4-dihydro-6,7-dimethoxy-2(1H)-isoquinolinyl)ethyl]phenyl]amino]carbonyl]phenyl]- (9CI) (CA INDEX NAME)





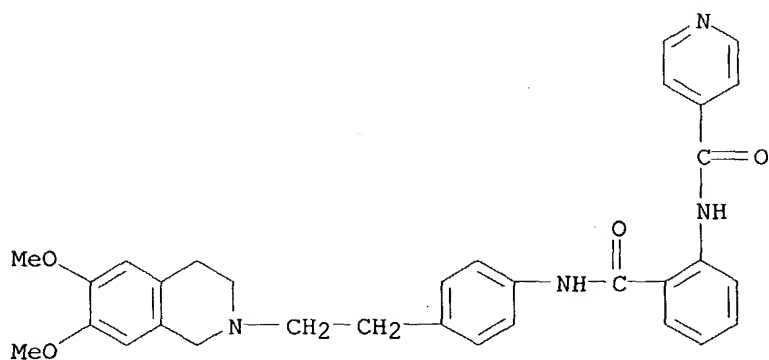
RN 206873-74-7 HCAPLUS

CN 3-Pyridinecarboxamide, N-[2-[[[4-[2-(3,4-dihydro-6,7-dimethoxy-2(1H)-isoquinolinyl)ethyl]phenyl]amino]carbonyl]phenyl]- (9CI) (CA INDEX NAME)



RN 206873-75-8 HCAPLUS

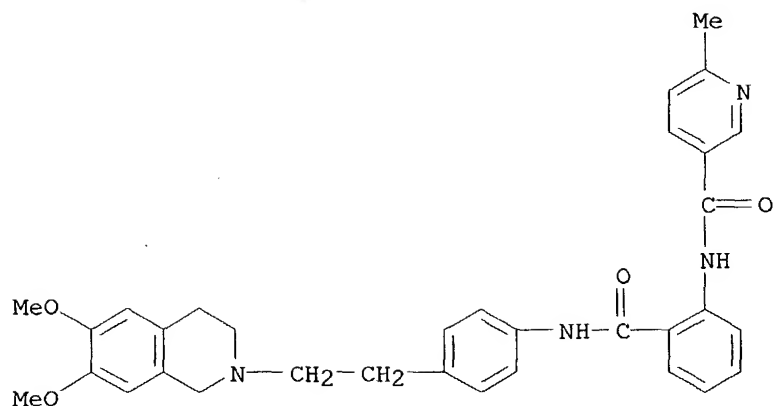
CN 4-Pyridinecarboxamide, N-[2-[[[4-[2-(3,4-dihydro-6,7-dimethoxy-2(1H)-isoquinolinyl)ethyl]phenyl]amino]carbonyl]phenyl]- (9CI) (CA INDEX NAME)



RN 206873-78-1 HCAPLUS

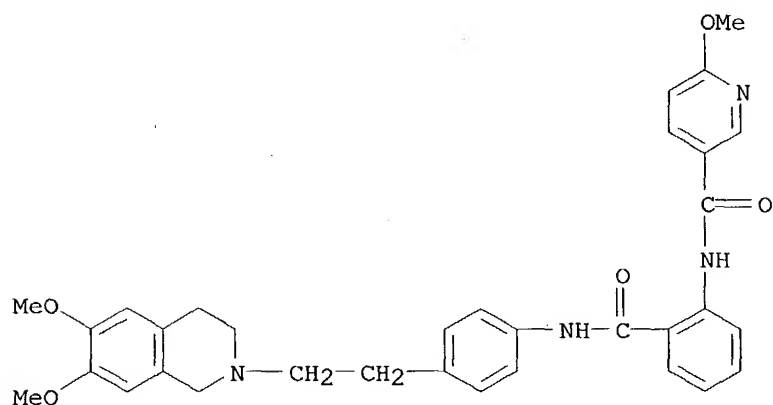
CN 3-Pyridinecarboxamide, N-[2-[[[4-[2-(3,4-dihydro-6,7-dimethoxy-2(1H)-isoquinolinyl)ethyl]phenyl]amino]carbonyl]phenyl]-6-methyl- (9CI) (CA INDEX NAME)





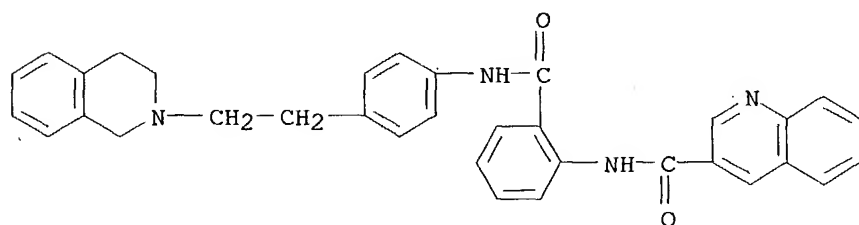
RN 206873-79-2 HCAPLUS

CN 3-Pyridinecarboxamide, N-[2-[[[4-[2-(3,4-dihydro-6,7-dimethoxy-2(1H)-  
isoquinolinyl)ethyl]phenyl]amino]carbonyl]phenyl]-6-methoxy- (9CI) (CA  
INDEX NAME)



RN 206874-31-9 HCAPLUS

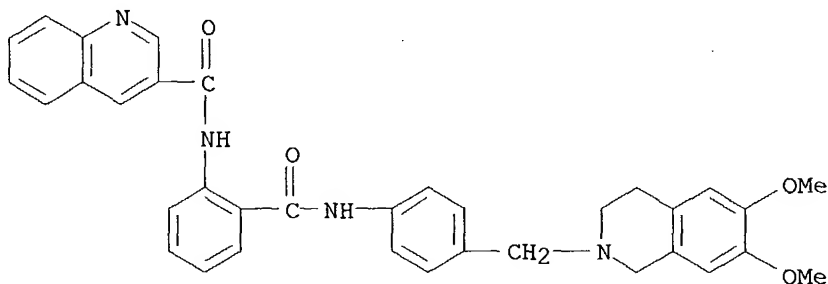
CN 3-Quinolinescarboxamide, N-[2-[[[4-[2-(3,4-dihydro-2(1H)-isoquinolinyl)ethyl]phenyl]amino]carbonyl]phenyl]- (9CI) (CA INDEX NAME)



RN 206874-33-1 HCAPLUS

CN 3-Quinolinedicarboxamide, N-[2-[[[4-[(3,4-dihydro-6,7-dimethoxy-2(1H)-isoquinolinyl)methyl]phenyl]amino]carbonyl]phenyl]- (9CI) (CA INDEX NAME)





IT 206874-69-3P 206874-70-6P 206874-71-7P

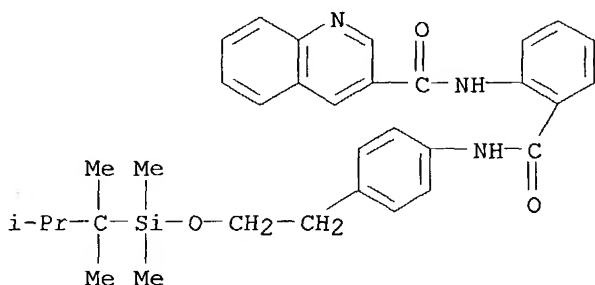
206874-85-3P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(preparation of anthranilic acid derivs. as multi-drug resistance modulators)

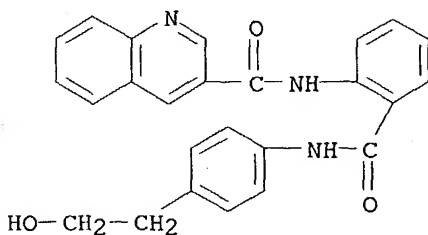
RN 206874-69-3 HCAPLUS

CN 3-Quinolinecarboxamide, N-[2-[[[4-(2-[[dimethyl(1,1,2-trimethylpropyl)silyl]oxy]ethyl]phenyl]amino]carbonyl]phenyl]- (9CI) (CA INDEX NAME)



RN 206874-70-6 HCAPLUS

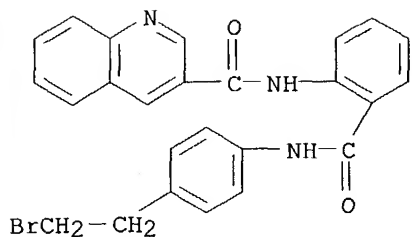
CN 3-Quinolinecarboxamide, N-[2-[[[4-(2-hydroxyethyl)phenyl]amino]carbonyl]phenyl]- (9CI) (CA INDEX NAME)



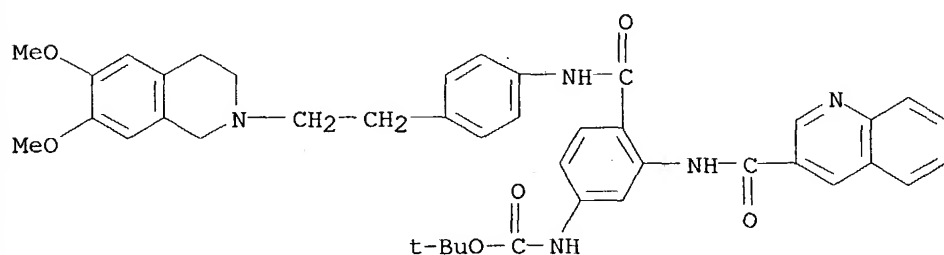
RN 206874-71-7 HCAPLUS

CN 3-Quinolinecarboxamide, N-[2-[[[4-(2-bromoethyl)phenyl]amino]carbonyl]phenyl]- (9CI) (CA INDEX NAME)





RN 206874-85-3 HCAPLUS  
 CN Carbamic acid, [4-[[[4-[2-(3,4-dihydro-6,7-dimethoxy-2(1H)-isoquinolinyl)ethyl]phenyl]amino]carbonyl]-3-[(3-quinolinylcarbonyl)amino]phenyl]-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

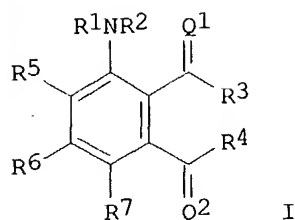


RE.CNT 6 THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS RECORD  
 ALL CITATIONS AVAILABLE IN THE RE FORMAT

L10 ANSWER 13 OF 33 HCAPLUS COPYRIGHT 2004 ACS on STN  
 AN 1998:13933 HCAPLUS  
 DN 128:75193  
 TI Preparation of aminophthalic acid derivatives as pesticides.  
 IN Elbe, Hans-Ludwig; Dutzmann, Stefan; Stenzel, Klaus  
 PA Bayer Aktiengesellschaft, Germany  
 SO PCT Int. Appl., 110 pp.  
 CODEN: PIXXD2  
 DT Patent  
 LA German  
 FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9747589	A1	19971218	WO 1997-EP2845	19970602 <--
W: AU, BB, BG, BR, BY, CA, CN, CZ, HU, IL, JP, KR, KZ, LK, MX, NO, NZ, PL, RO, RU, SK, TR, UA, US				
RW: AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG				
DE 19623744	A1	19971218	DE 1996-19623744	19960614 <--
AU 9730936	A1	19980107	AU 1997-30936	19970602 <--
PRAI DE 1996-19623744		19960614		
WO 1997-EP2845		19970602		
OS MARPAT 128:75193				
GI				





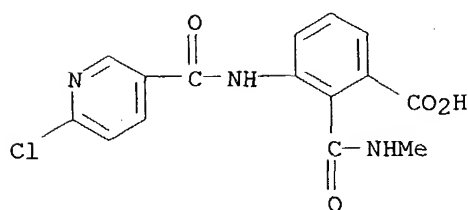
AB Use of title compds. [I; Q1, Q2 = O, S; R1 = H, R11CO; R2 = R8R9NCO, R10OCO, R11CO, R12SO2; R8 = H, alkyl, cycloalkyl, (substituted) aryl, heteroaryl; R9 = H, alkyl; R8R9N = (substituted) heterocyclyl; R10 = (substituted) alkyl, alkenyl, alkynyl, cycloalkyl, heterocyclyl; R11 = H, (substituted) alkyl, alkenyl, alkynyl, cycloalkyl, cycloalkenyl, aryl, aralkyl, heterocyclyl; R12 = alkyl, aryl, heterocyclyl; R1R2 = CR13R14; R1R2N = (substituted) heterocyclyl; R13 = H, alkyl, alkenyl, cycloalkyl, (substituted) aryl, heterocyclyl; R14 = H, alkyl, alkenyl, cycloalkyl, cycloalkenyl, aryl, heterocyclyl, alkoxy, dialkylamino; R13R14 = cycloalkylidene; R3, R4 = OH, alkoxy, alkenyloxy, alkynyloxy, aralkoxy, cycloalkoxy, cycloalkenyloxy, aryloxy, heterocycliloxy, aralkylthio, SH, arylthio, amino, etc.; R5-R7 = H, halo, cyano, NO2, alkyl, alkoxy, alkylthio, haloalkyl, haloalkoxy, haloalkylthio] for combating pests is claimed. Thus, 3-nitrophthalic anhydride was heated with BuOH to give 88.1% 3-nitrophthalic acid 2-Bu ester. The latter was refluxed with DMF di-Me acetal in PhMe to give 92% 3-nitrophthalic acid 1-Me ester 2-Bu ester. This in H2O/THF was treated with Zn and HCl to give 82.4% 3-aminophthalic acid 1-Me ester 2-Bu ester. I at 100 ppm gave 82-98% control of Botrytis cinerea on beans.

IT 200709-28-0P

RL: AGR (Agricultural use); BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation); USES (Uses) (preparation of aminophthalic acid derivs. as pesticides)

RN 200709-28-0 HCAPLUS

CN Benzoic acid, 3-[[[(6-chloro-3-pyridinyl)carbonyl]amino]-2-[(methyamino)carbonyl]- (9CI) (CA INDEX NAME)



L10 ANSWER 14 OF 33 HCAPLUS COPYRIGHT 2004 ACS on STN

AN 1997:667205 HCAPLUS

DN 127:262339

TI Novel Folding Patterns in a Family of Oligoanthranilamides: Non-Peptide Oligomers That Form Extended Helical Secondary Structures

AU Hamuro, Yoshitomo; Geib, Steven J.; Hamilton, Andrew D.



CS Department of Chemistry, University of Pittsburgh, Pittsburgh, PA, 15260, USA

SO Journal of the American Chemical Society (1997), 119(44), 10587-10593  
CODEN: JACSAT; ISSN: 0002-7863

PB American Chemical Society

DT Journal

LA English

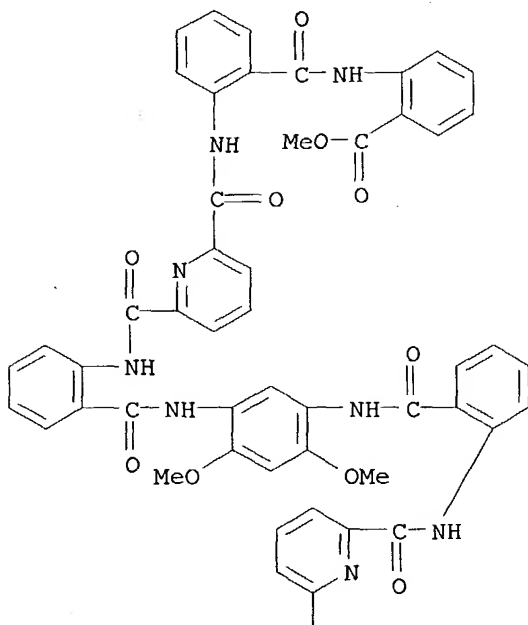
AB Anthranilamide derivs. are used as the basis for a series of novel oligomers that fold into helical secondary structures in the solid state. When combined with pyridine-2,6-dicarboxylic acid and 4,6-dimethoxy-1,3-diaminobenzene subunits, oligoanthranilamides can be induced to take up a coiled conformation corresponding to two turns of a helix. X-ray crystallog. show that intramol. hydrogen bonding and  $\pi$ - $\pi$  stacking interactions are important in stabilizing the extended helical structures. Furthermore, both exptl. and calculated  $^1\text{H}$  NMR methods indicate that related conformations are taken up by the oligomers in chloroform solution

IT **196312-02-4P 196312-04-6P**  
RL: PRP (Properties); SPN (Synthetic preparation); PREP (Preparation) (crystallog.; helical conformation of oligoanthranilamides)

RN 196312-02-4 HCAPLUS

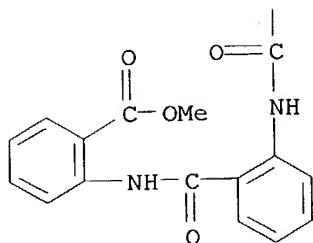
CN Benzoic acid, 2,2'-[(4,6-dimethoxy-1,3-phenylene)bis(iminocarbonyl-2,1-phenyleneiminocarbonyl-6,2-pyridinediylcarbonylimino-2,1-phenylenecarbonylimino)]bis-, dimethyl ester (9CI) (CA INDEX NAME)

PAGE 1-A



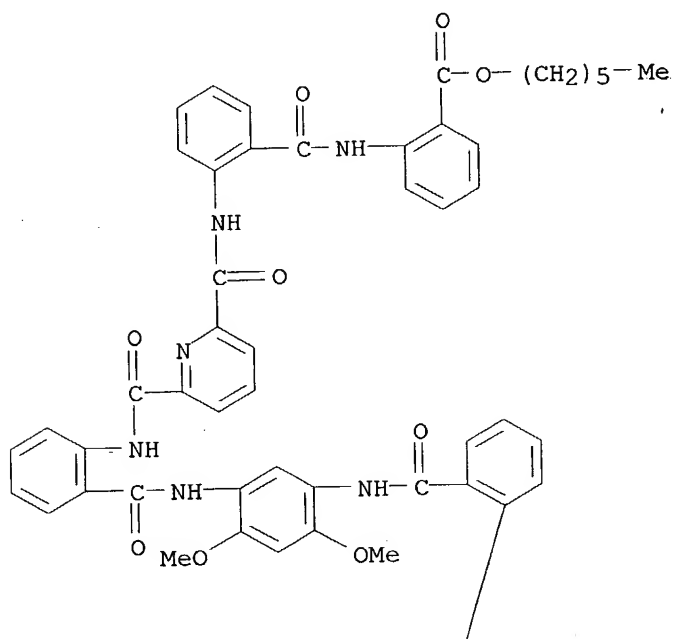


PAGE 2-A

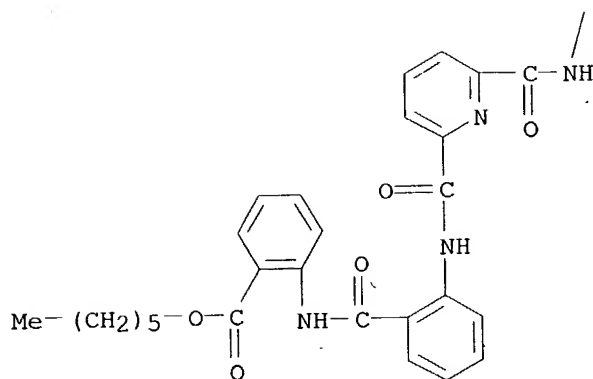


RN 196312-04-6 HCAPLUS  
 CN Benzoic acid, 2,2'-[(4,6-dimethoxy-1,3-phenylene)bis(iminocarbonyl-2,1-phenyleneiminocarbonyl-6,2-pyridinediylcarbonylimino-2,1-phenylenecarbonylimino)]bis-, dihexyl ester (9CI) (CA INDEX NAME)

PAGE 1-A





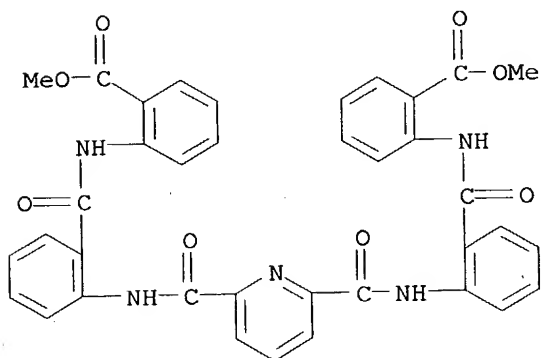


IT 155138-99-1

RL: PRP (Properties)  
(helical conformation of oligoanthranilamides)

RN 155138-99-1 HCAPLUS

CN Benzoic acid, 2,2'-[2,6-pyridinediylbis(carbonylimino-2,1-phenylenecarbonylimino)]bis-, dimethyl ester (9CI) (CA INDEX NAME)



IT 196311-73-6P 196311-77-0P 196311-92-9P

196311-95-2P

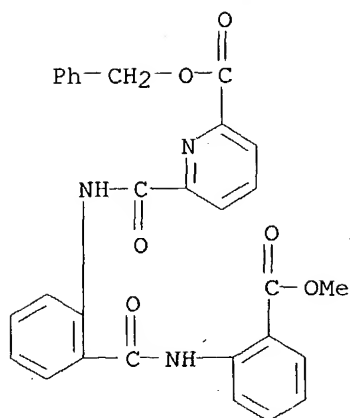
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT  
(Reactant or reagent)

(intermediate; preparation of oligoanthranilamides)

RN 196311-73-6 HCAPLUS

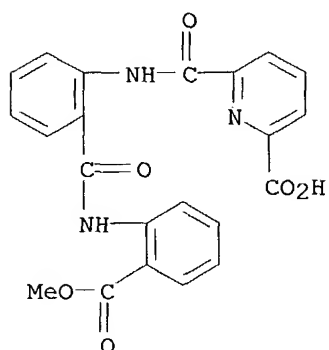
CN 2-Pyridinecarboxylic acid, 6-[[[2-[[[2-(methoxycarbonyl)phenyl]amino]carbonyl]phenyl]amino]carbonyl]-, phenylmethyl ester (9CI) (CA INDEX NAME)





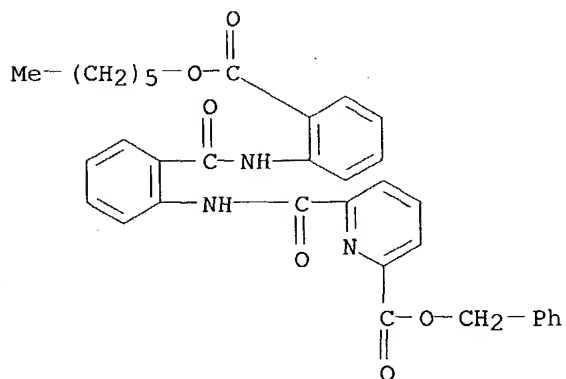
RN 196311-77-0 HCAPLUS

CN 2-Pyridinecarboxylic acid, 6-[[[2-[[[2-(methoxycarbonyl)phenyl]amino]carbonyl]phenyl]amino]carbonyl]- (9CI) (CA INDEX NAME)



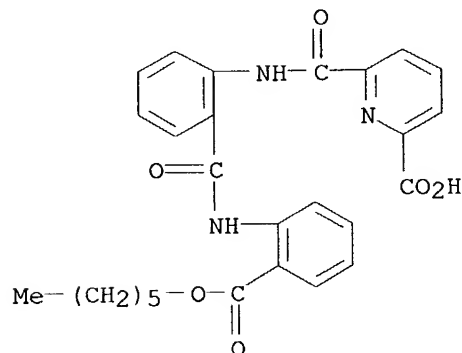
RN 196311-92-9 HCAPLUS

CN 2-Pyridinecarboxylic acid, 6-[[[2-[[[2-(hexyloxy)carbonyl]phenyl]amino]carbonyl]phenyl]amino]carbonyl]-, phenylmethyl ester (9CI) (CA INDEX NAME)





RN 196311-95-2 HCAPLUS  
 CN 2-Pyridinecarboxylic acid, 6-[[[2-[[[2-[(hexyloxy)carbonyl]phenyl]amino]carbonyl]phenyl]amino]carbonyl]- (9CI) (CA INDEX NAME)

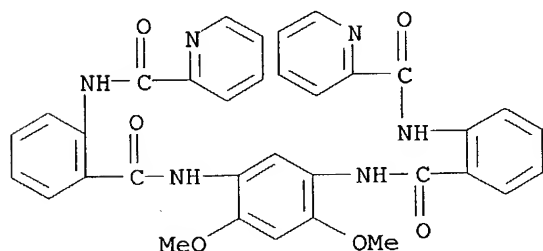


IT 196312-07-9P

RL: PRP (Properties); SPN (Synthetic preparation); PREP (Preparation)  
 (model; helical conformation of oligoanthranilamides)

RN 196312-07-9 HCAPLUS

CN 2-Pyridinecarboxamide, N,N'-[(4,6-dimethoxy-1,3-phenylene)bis(iminocarbonyl-2,1-phenylene)]bis- (9CI) (CA INDEX NAME)



L10 ANSWER 15 OF 33 HCAPLUS COPYRIGHT 2004 ACS on STN

AN 1997:543532 HCAPLUS

DN 127:134690

TI Inhibitors of MAdCAM-1-mediated interactions and methods of use therefor

IN Schwender, Charles F.; Shroff, Hitesh N.

PA Leukosite, Inc., USA

SO PCT Int. Appl., 107 pp.

CODEN: PIXXD2

DT Patent

LA English

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 9725351	A2	19970717	WO 1997-US291	19970103 <--
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RO, RU, SD, SE, SG, SI, SK, TJ, TM, TR, TT, UA, UG, US, UZ, VN,  
 AM, AZ, BY, KG, KZ, MD, RU, TJ, TM  
 RW: KE, LS, MW, SD, SZ, UG, AT, BE, CH, DE, DK, ES, FI, FR, GB, GR,  
 IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML,  
 MR, NE, SN, TD, TG

US 6037324	A	20000314	US 1996-582740	19960104
CA 2241169	AA	19970717	CA 1997-2241169	19970103 <--
AU 9722415	A1	19970801	AU 1997-22415	19970103 <--
AU 721615	B2	20000713		
EP 871670	A2	19981021	EP 1997-905564	19970103 <--

R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,  
 IE, FI

JP 2000503203	T2	20000321	JP 1997-525381	19970103
US 6274556	B1	20010814	US 1998-109879	19980702
US 2002103111	A1	20020801	US 2001-859214	20010516
PRAI US 1996-582740	A2	19960104		
WO 1997-US291	W	19970103		
US 1998-109879	A1	19980702		

OS MARPAT 127:134690

AB The present invention provides novel compds. comprising peptide sequences which mimic the conserved amino acid motif LDTSL of MAdCAM-1 and which have groups bonded to the N- and C-termini. Also provided are methods of inhibiting the interaction of a cell bearing a ligand of MAdCAM-1, such as human  $\alpha 4\beta 7$ , with MAdCAM-1 or a portion thereof (e.g., the extracellular domain), comprising contacting the cell with a compound of the present invention. The MAdCAM-1 inhibitors are useful for treating disease associated with leukocyte infiltration of tissue, such as inflammatory bowel disease, with fewer side effects in other tissues where adhesion is mediated by  $\alpha 4\beta 1$  integrin, for example. The inhibitors can also be used for induction of antibodies selectively bind epitopes of MAdCAM-1 and useful for quantitating MAdCAM-1 on cell surface.

IT 193218-88-1

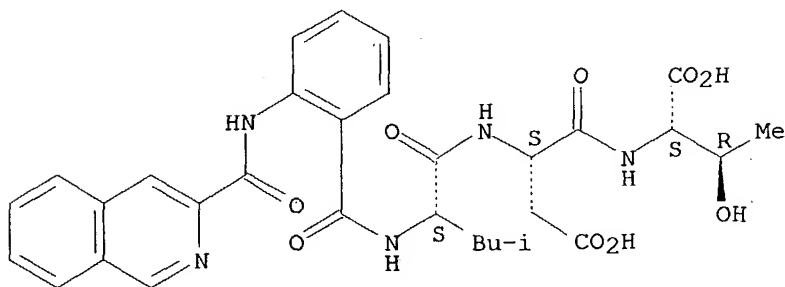
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(peptide inhibitors of MAdCAM-1-mediated interactions for treating disease associated with leukocyte infiltration)

RN 193218-88-1 HCAPLUS

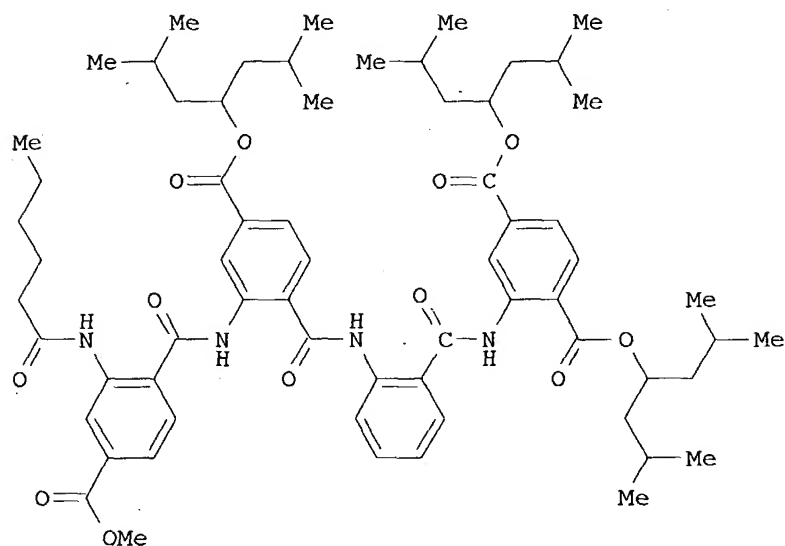
CN L-Threonine, N-[2-[(3-isoquinolinylcarbonyl)amino]benzoyl]-L-leucyl-L- $\alpha$ -aspartyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.





DN 125:167496  
 TI Oligoanthranilamides. Non-Peptide Subunits That Show Formation of Specific Secondary Structure  
 AU Hamuro, Yoshitomo; Geib, Steven J.; Hamilton, Andrew D.  
 CS Department of Chemistry, University of Pittsburgh, Pittsburgh, PA, 15260, USA  
 SO Journal of the American Chemical Society (1996), 118(32), 7529-7541  
 CODEN: JACSAT; ISSN: 0002-7863  
 PB American Chemical Society  
 DT Journal  
 LA English  
 GI



I

AB A family of novel oligomers based on the anthranilamide nucleus has been prepared and shown to form well-defined secondary structural features. H NMR and X-ray crystallog. techniques have demonstrated that intramol. hydrogen bonds play a key role in stabilizing both linear sheet and helical conformational forms. An example compound is the oligomeric anthranilamide I.

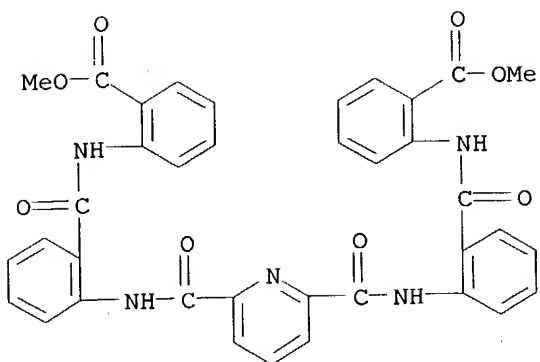
IT 155138-99-1P 155139-01-8P 180133-05-5P  
 180133-06-6P

RL: PRP (Properties); SPN (Synthetic preparation); PREP (Preparation)  
 (preparation and secondary structure determination of oligomeric anthranilamides)

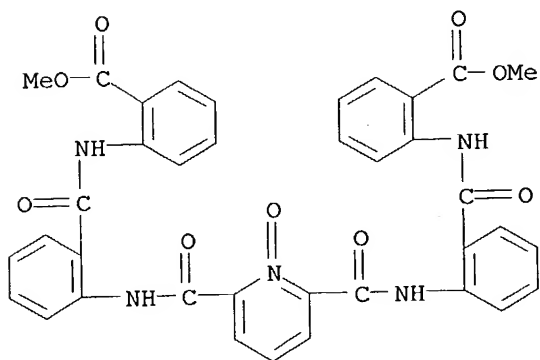
RN 155138-99-1 HCAPLUS

CN Benzoic acid, 2,2'-[2,6-pyridinediylbis(carbonylimino-2,1-phenylenecarbonylimino)]bis-, dimethyl ester (9CI) (CA INDEX NAME)

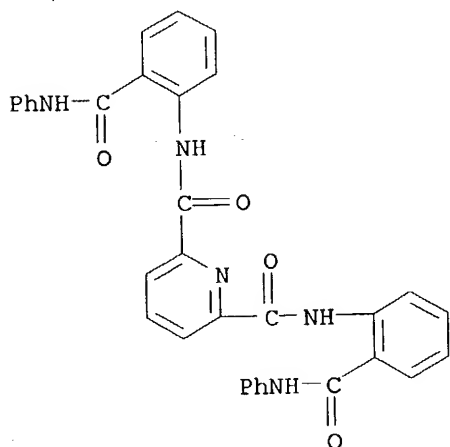




RN 155139-01-8 HCAPLUS  
 CN Benzoic acid, 2,2'-[(1-oxido-2,6-pyridinediyl)bis(carbonylimino-2,1-phenylenecarbonylimino)]bis-, dimethyl ester (9CI) (CA INDEX NAME)

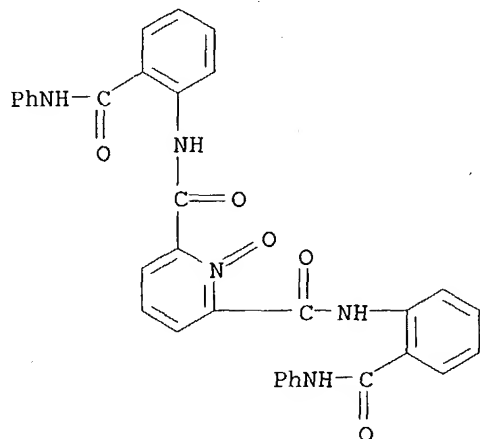


RN 180133-05-5 HCAPLUS  
 CN 2,6-Pyridinedicarboxamide, N,N'-bis[2-[(phenylamino)carbonyl]phenyl]- (9CI) (CA INDEX NAME)





RN 180133-06-6 HCAPLUS  
 CN 2,6-Pyridinedicarboxamide, N,N'-bis[2-[(phenylamino)carbonyl]phenyl]-, 1-oxide (9CI) (CA INDEX NAME)



L10 ANSWER 17 OF 33 HCAPLUS COPYRIGHT 2004 ACS on STN  
 AN 1995:995215 HCAPLUS  
 DN 124:117098  
 TI Preparation of pyridylanilide derivatives as fungicides  
 IN Riordan, Peter Dominic; Boddy, Ian Kenneth; Osbourn, Susan Elisabeth  
 PA Agrevo UK Ltd., UK  
 SO PCT Int. Appl., 35 pp.  
 CODEN: PIXXD2  
 DT Patent  
 LA English  
 FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI WO 9525723	A1	19950928	WO 1995-GB570	19950316 <--
W: AU, BG, BR, CA, CN, CZ, FI, HU, JP, KR, KZ, MX, NO, NZ, PL, RO, RU, SD, SK, UA, US				
RW: KE, MW, SD, SZ, UG, AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG				
AU 9518981	A1	19951009	AU 1995-18981	19950316 <--
AU 688473	B2	19980312		
EP 750611	A1	19970102	EP 1995-911403	19950316 <--
EP 750611	B1	19980708		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LI, LU, NL, PT, SE				
CN 1143954	A	19970226	CN 1995-192131	19950316 <--
HU 74778	A2	19970228	HU 1996-2547	19950316 <--
HU 214292	B	19980302		
BR 9507105	A	19970909	BR 1995-7105	19950316 <--
JP 09510471	T2	19971021	JP 1995-524455	19950316 <--
AT 168099	E	19980715	AT 1995-911403	19950316 <--
ZA 9502205	A	19951031	ZA 1995-2205	19950317 <--
US 5756524	A	19980526	US 1996-714149	19960918 <--
PRAI GB 1994-5347		19940318		

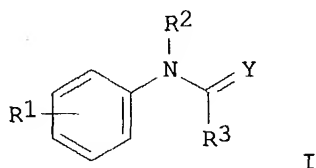


WO 1995-GB570

19950316

OS MARPAT 124:117098

GI



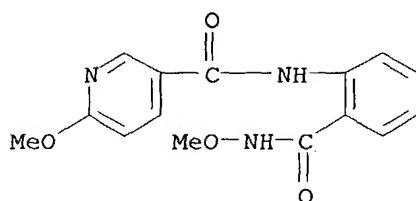
AB Title compds. I [X = O, S; R1, R2 = H, alkyl, cycloalkyl, alkenyl, etc.; R3 = (substituted) pyridyl, pyrimidinyl, pyrazinyl, etc.] were prepared  
 Condensation of 6-methoxynicotinoyl chloride with Me anthranilate in the presence of Et3N in THF afforded I (X = O; R1 = R2 = H; R3 = 6-methoxy-3-pyridyl) which showed activity against barley powdery mildew, rice blast and apple scab at  $\leq 500$  ppm.

IT 173055-91-9P 173056-05-8P 173056-17-2P  
 173056-21-8P 173056-46-7P 173056-75-2P  
 173056-88-7P 173056-95-6P 173056-96-7P  
 173056-97-8P 173057-04-0P 173057-19-7P

RL: AGR (Agricultural use); BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation); USES (Uses)  
 (preparation of anilide derivs. as fungicides)

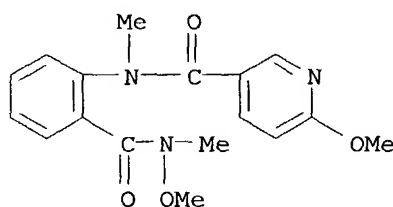
RN 173055-91-9 HCAPLUS

CN 3-Pyridinecarboxamide, 6-methoxy-N-[2-[(methoxyamino)carbonyl]phenyl]-  
 (9CI) (CA INDEX NAME)



RN 173056-05-8 HCAPLUS

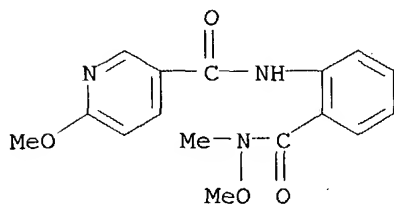
CN 3-Pyridinecarboxamide, 6-methoxy-N-[2-[(methoxymethylamino)carbonyl]phenyl]-N-methyl- (9CI) (CA INDEX NAME)





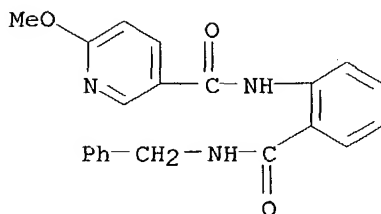
RN 173056-17-2 HCAPLUS

CN 3-Pyridinecarboxamide, 6-methoxy-N-[2-[(methoxymethylamino)carbonyl]phenyl]- (9CI) (CA INDEX NAME)



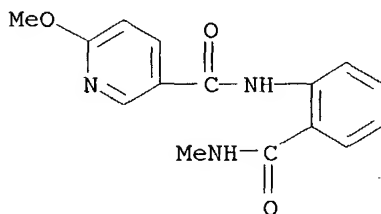
RN 173056-21-8 HCAPLUS

CN 3-Pyridinecarboxamide, 6-methoxy-N-[2-[(phenylmethyl)amino]carbonyl]phenyl]- (9CI) (CA INDEX NAME)



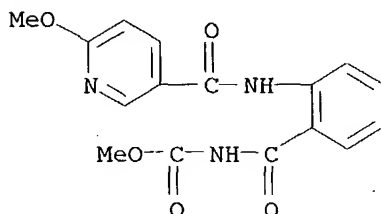
RN 173056-46-7 HCAPLUS

CN 3-Pyridinecarboxamide, 6-methoxy-N-[2-[(methylamino)carbonyl]phenyl]- (9CI) (CA INDEX NAME)



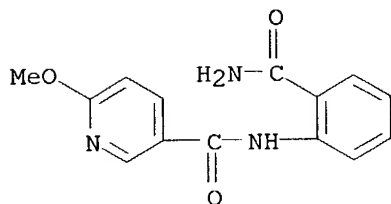
RN 173056-75-2 HCAPLUS

CN Carbamic acid, [2-[[[(6-methoxy-3-pyridinyl)carbonyl]amino]benzoyl]-, methyl ester (9CI) (CA INDEX NAME)

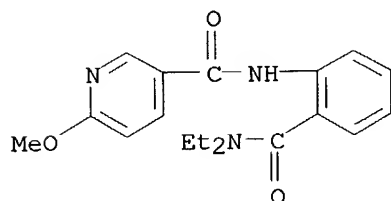




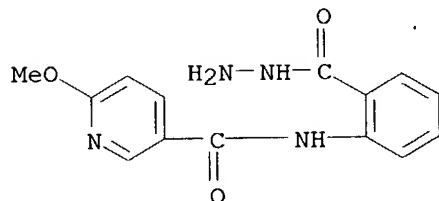
RN 173056-88-7 HCAPLUS  
 CN 3-Pyridinecarboxamide, N-[2-(aminocarbonyl)phenyl]-6-methoxy- (9CI) (CA INDEX NAME)



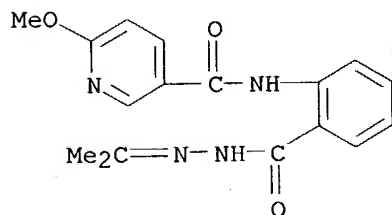
RN 173056-95-6 HCAPLUS  
 CN 3-Pyridinecarboxamide, N-[2-[(diethylamino)carbonyl]phenyl]-6-methoxy- (9CI) (CA INDEX NAME)



RN 173056-96-7 HCAPLUS  
 CN Benzoic acid, 2-[[[(6-methoxy-3-pyridinyl)carbonyl]amino]-, hydrazide (9CI) (CA INDEX NAME)

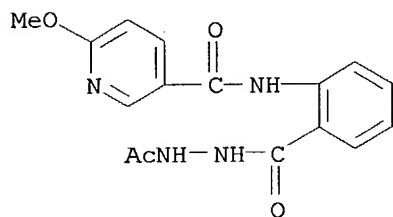


RN 173056-97-8 HCAPLUS  
 CN Benzoic acid, 2-[[[(6-methoxy-3-pyridinyl)carbonyl]amino]-, (1-methylethylidene)hydrazide (9CI) (CA INDEX NAME)

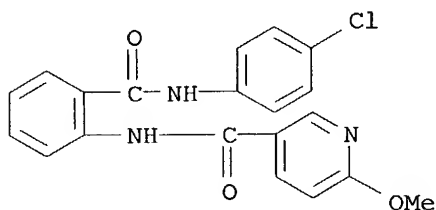




RN 173057-04-0 HCAPLUS  
 CN Benzoic acid, 2-[[[(6-methoxy-3-pyridinyl)carbonyl]amino]-,  
 2-acetylhydrazide (9CI) (CA INDEX NAME)



RN 173057-19-7 HCAPLUS  
 CN 3-Pyridinecarboxamide, N-[2-[[[(4-chlorophenyl)amino]carbonyl]phenyl]-6-methoxy- (9CI) (CA INDEX NAME)



L10 ANSWER 18 OF 33 HCAPLUS COPYRIGHT 2004 ACS on STN  
 AN 1995:858623 HCAPLUS  
 DN 123:256357  
 TI Preparation of anthranilic acid amide derivative as cyclic guanosine  
 monophosphate-phosphodiesterase inhibitors  
 IN Ozaki, Fumihiko; Ishibashi, Keiji; Ikuta, Hironori; Ishihara, Hiroki;  
 Souda, Shigeru  
 PA Japan  
 SO PCT Int. Appl., 204 pp.  
 CODEN: PIXXD2  
 DT Patent  
 LA Japanese  
 FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 9518097	A1	19950706	WO 1994-JP2262	19941227 <--
	W: AU, CA, CN, FI, HU, KR, NO, NZ, RU, US				
	RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
	CA 2155662	AA	19950706	CA 1994-2155662	19941227 <--
	AU 9512824	A1	19950717	AU 1995-12824	19941227 <--
	AU 694465	B2	19980723		
	EP 686625	A1	19951213	EP 1995-903999	19941227 <--
	EP 686625	B1	19990526		
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LI, LU, MC, NL, PT, SE				
	CN 1118595	A	19960313	CN 1994-191311	19941227 <--
	JP 08188563	A2	19960723	JP 1994-336920	19941227 <--
	HU 74450	A2	19961230	HU 1995-2512	19941227 <--
	RU 2128644	C1	19990410	RU 1995-120194	19941227 <--



AT 180468	E	19990615	AT 1995-903999	19941227 <--
FI 9503968	A	19951019	FI 1995-3968	19950823 <--
NO 9503305	A	19951025	NO 1995-3305	19950823 <--
US 5716993	A	19980210	US 1995-507476	19950914 <--
PRAI JP 1993-347092	A	19931227.		
JP 1994-299110	A	19941109		
WO 1994-JP2262	W	19941227		
OS MARPAT 123:256357				
GI				

\* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT \*

AB Anthranilamide derivs. [I; R1, R2, R3, R4 = H, halo, OH, (halo)alkyl, (halo)alkoxy, nitro, hydroxyalkyl, cyano, (CH2)pNR9R10, S(O)qR13, (un)protected CO2H, (un)substituted tetrazolyl, CONH2, pyrazolyl, or imidazolyl; or adjacent two substituents selected from R1 - R4 together with the C atoms bonded to them forms a ring; wherein R9, R10 = H, (halo)alkyl, arylalkyl, heteroarylalkyl, acyl, (un)protected CO2H; or NR9R10 forms a ring; p = 0, 1-6; R13 = H, (halo)alkyl; q = 0, 1-2; R5, R6 = H, halo, OH, cyano, (halo)alkyl, (halo)alkoxy; or R5 and R6 together with the C atoms bonded to them form cycloalkane, oxolane, 1,3-dioxolane, or 1,4-dioxane ring; W = N, CH; R7, R8 = H, (halo)alkyl; or R1 and R7 together with the C atoms bonded to them form a ring optionally containing other N, O, or S atom; A = H, (halo)alkyl, X(CH2)mZ; wherein X = CO, CS, CH2, SO2; Z = OH, (halo)alkoxy, cyano, halo, etc.; Y = O, S; n = 0, 1-6] or pharmacol. acceptable salts thereof are prepared These compds. are useful for the treatment of ischemic heart disease, angina pectoris, hypertension, pulmonary hypertension, heart failure, and asthma. Thus, 2-nitro-5-chlorobenzoic acid was refluxed with SOCl2 in benzene for 4 h and concentrated to give 2-nitro-5-chlorobenzoyl chloride which was amidated with piperonylamine in the presence of Et3N in THF to give a benzamide (II; R = NO2). This compound was reduced by Fe powder in a mixture of AcOH, H2O, and MeOH under gentle refluxing to give, after concentration and treatment with concentrated HCl in EtOH, N-piperonylanthranilamide derivative II. HCl (R

=

NH2). An anthranilamide derivative (III) showed IC50 of 0.4 nM against cyclic guanosine monophosphate-phosphodiesterase preparation from pig aorta.

IT 169043-36-1P 169043-37-2P 169044-06-8P

169044-07-9P 169044-08-0P 169044-09-1P

169044-10-4P 169044-11-5P 169044-56-8P

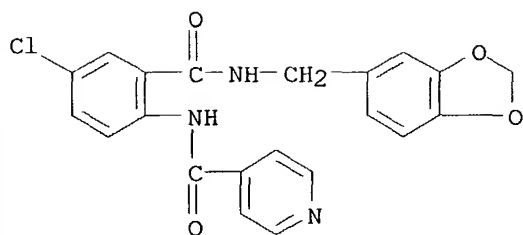
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of anthranilamide derivs. as cyclic guanosine monophosphate-phosphodiesterase inhibitors)

RN 169043-36-1 HCAPLUS

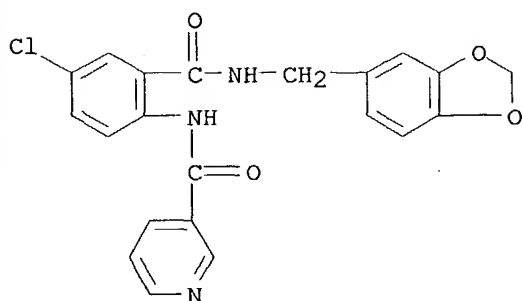
CN 4-Pyridinecarboxamide, N-[2-[[[(1,3-benzodioxol-5-ylmethyl)amino]carbonyl]-4-chlorophenyl]- (9CI) (CA INDEX NAME)





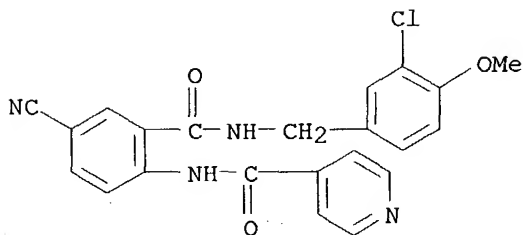
RN 169043-37-2 HCAPLUS

CN 3-Pyridinecarboxamide, N-[2-[[[(1,3-benzodioxol-5-ylmethyl)amino]carbonyl]-4-chlorophenyl]- (9CI) (CA INDEX NAME)



RN 169044-06-8 HCAPLUS

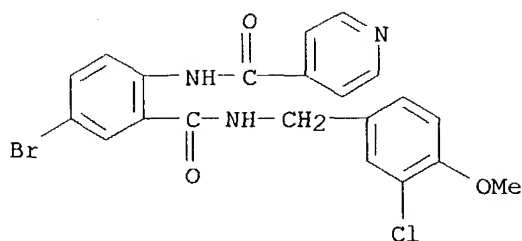
CN 4-Pyridinecarboxamide, N-[2-[[[(3-chloro-4-methoxyphenyl)methyl]amino]carbonyl]-4-cyanophenyl]- (9CI) (CA INDEX NAME)



RN 169044-07-9 HCAPLUS

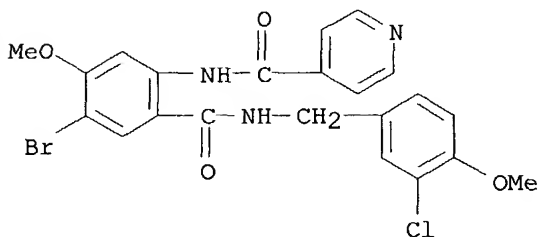
CN 4-Pyridinecarboxamide, N-[4-bromo-2-[[[(3-chloro-4-methoxyphenyl)methyl]amino]carbonyl]phenyl]- (9CI) (CA INDEX NAME)





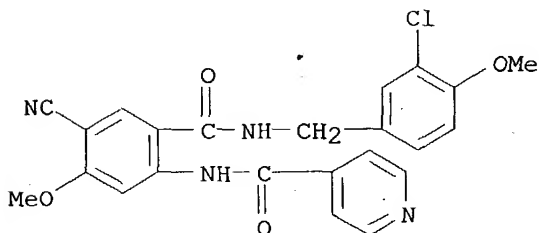
RN 169044-08-0 HCAPLUS

CN 4-Pyridinecarboxamide, N-[4-bromo-2-[[[(3-chloro-4-methoxyphenyl)methyl]amino]carbonyl]-5-methoxyphenyl]- (9CI) (CA INDEX NAME)



RN 169044-09-1 HCAPLUS

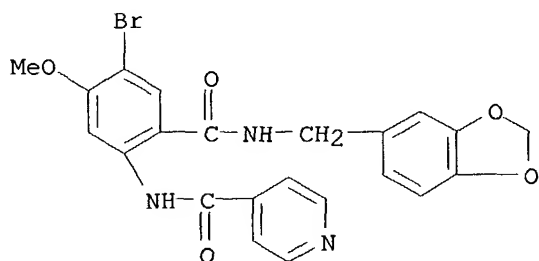
CN 4-Pyridinecarboxamide, N-[2-[[[(3-chloro-4-methoxyphenyl)methyl]amino]carbonyl]-4-cyano-5-methoxyphenyl]- (9CI) (CA INDEX NAME)



RN 169044-10-4 HCAPLUS

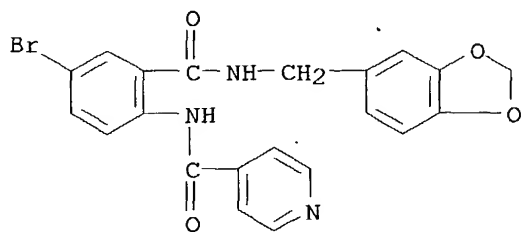
CN 4-Pyridinecarboxamide, N-[2-[[[(1,3-benzodioxol-5-ylmethyl)amino]carbonyl]-4-bromo-5-methoxyphenyl]- (9CI) (CA INDEX NAME)





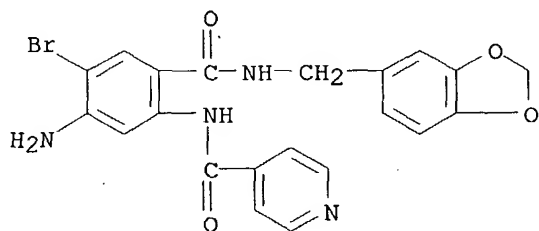
RN 169044-11-5 HCAPLUS

CN 4-Pyridinecarboxamide, N-[2-[[[(1,3-benzodioxol-5-ylmethyl)amino]carbonyl]-4-bromophenyl]- (9CI) (CA INDEX NAME)



RN 169044-56-8 HCAPLUS

CN 4-Pyridinecarboxamide, N-[5-amino-2-[[[(1,3-benzodioxol-5-ylmethyl)amino]carbonyl]-4-bromophenyl]- (9CI) (CA INDEX NAME)



L10 ANSWER 19 OF 33 HCAPLUS COPYRIGHT 2004 ACS on STN

AN 1995:795361 HCAPLUS

DN 124:29779

TI 4-Aminoquinazoline derivatives as inhibitors of cGMP phosphodiesterase and TXA2 synthetase

IN Lee, Sung J.; Konishi, Yoshitaka; Macina, Orest T.; Kondo, Kigen; Yu, Dingwei T.

PA Ono Pharmaceutical Co., Ltd., Japan

SO U.S., 42 pp. Cont.-in-part of U.S. Ser. No. 76,431, abandoned.

CODEN: USXXAM

DT Patent

LA English

FAN.CNT 3

PATENT NO.

KIND

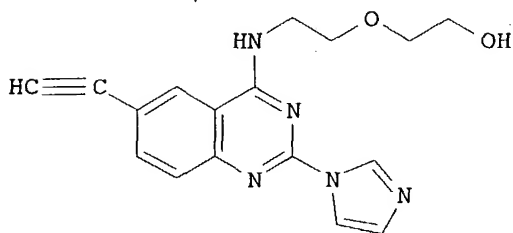
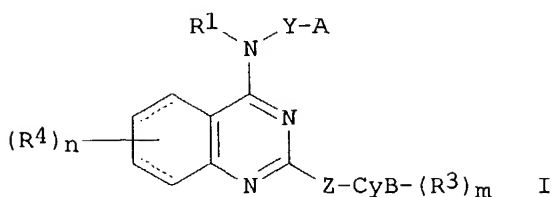
DATE

APPLICATION NO.

DATE



PI	US 5439895	A	19950808	US 1993-154691	19931119 <--
	JP 06192235	A2	19940712	JP 1993-197039	19930714 <--
	CA 2100626	AA	19940116	CA 1993-2100626	19930715 <--
	AT 208771	E	20011115	AT 1993-305557	19930715
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	PT 579496	T	20020531	PT 1993-305557	19930715
	JP 08099962	A2	19960416	JP 1995-264667	19950920 <--
	JP 2923742	B2	19990726		
PRAI	US 1992-913473	B2	19920715		
	US 1993-76431	B2	19930614		
OS	MARPAT 124:29779				
GI					



AB The compds. of the formula I and acid addition salts thereof, salts thereof, and hydrates thereof wherein R1 is hydrogen or C1-4 alkyl; Y is C1-6 alkylene; A is OR0 or S(O)pR0, in which R0 is C1-4 alkyl-hydroxy; p is 0-2; Z is single bond, methylene, ethylene, vinylene or ethynylene; CyB is (1) 7-membered, unsatd. or partially saturated, monocyclic hetero ring containing as hetero atoms, one, two or three nitrogen atoms, (2) 6-membered, unsatd. or partially saturated, monocyclic hetero ring containing as hetero atoms, two or three nitrogen atoms, (3) 6-membered, unsatd. or partially saturated, monocyclic hetero ring containing as hetero atom, one nitrogen atom, (4) 4- or 5-membered, unsatd. or partially saturated, monocyclic hetero ring containing as hetero atoms, one, two or three nitrogen atoms, or (5) 4-7 membered, unsatd. or partially saturated, monocyclic hetero ring containing as hetero atoms, one or two oxygen atoms, or one or two sulfur atoms; R3 = e.g., H, C1-4 alkyl, C1-4 alkoxy; R4 = e.g., H, C1-4 alkyl, C1-4 alkoxy; and m and n independently are 1 or 2; with the proviso that (1) a CyB ring does not bond to Z through a nitrogen atom in the CyB ring when Z is vinylene or



ethynylene, have inhibitory effect on cGMP-PDE, and addnl. on TXA2 synthetase. Thus, e.g., 2-(1-imidazolyl)-4-[2-(2-hydroxyethoxy)ethyl]amino-6-ethynylquinazoline.2HCl (II.2HCl) (prepared by desilylation of a silylacetylene precursor) exhibited inhibitory effect on cGMP-PDE and TXA2 synthetase with  $IC_{50} = 4.6 \times 10^{-8}$  M and  $1.33 \times 10^{-6}$  M, resp. Pharmaceutical formulations were given.

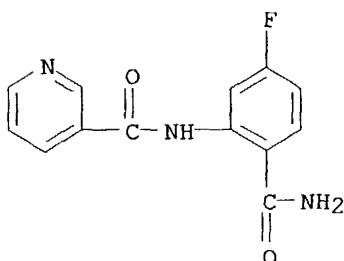
IT 157864-21-6P 157864-28-3P 157864-30-7P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(4-aminoquinazoline derivs. as inhibitors of cGMP phosphodiesterase and TXA2 synthetase)

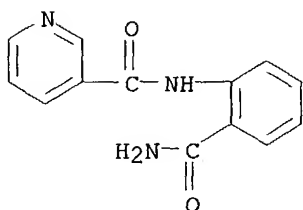
RN 157864-21-6 HCAPLUS

CN 3-Pyridinecarboxamide, N-[2-(aminocarbonyl)-5-fluorophenyl]- (9CI) (CA INDEX NAME)



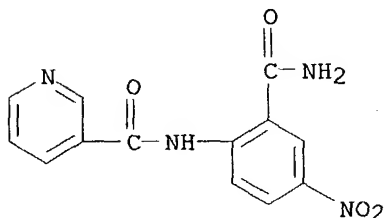
RN 157864-28-3 HCAPLUS

CN 3-Pyridinecarboxamide, N-[2-(aminocarbonyl)phenyl]- (9CI) (CA INDEX NAME)



RN 157864-30-7 HCAPLUS

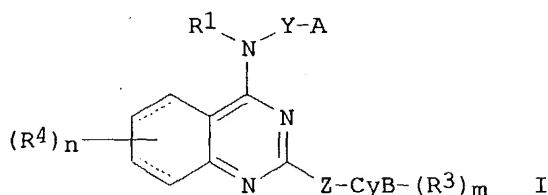
CN 3-Pyridinecarboxamide, N-[2-(aminocarbonyl)-4-nitrophenyl]- (9CI) (CA INDEX NAME)





L10 ANSWER 20 OF 33 HCAPLUS COPYRIGHT 2004 ACS on STN  
 AN 1995:761961 HCAPLUS  
 DN 123:340173  
 TI 4-Aminoquinazoline derivatives as inhibitors of cyclic guanosine  
 3',5'-monophosphate phosphodiesterase and thromboxane A2 synthetase  
 IN Lee, Sung J.; Konishi, Yoshitaka; Macina, Orest T.; Kondo, Kigen; Yu,  
 Dingwei T.  
 PA Ono Pharmaceutical Co., Ltd., Japan  
 SO U.S., 44 pp. Cont.-in-part of U.S. Ser. No. 76,431, abandoned.  
 CODEN: USXXAM  
 DT Patent  
 LA English  
 FAN.CNT 3

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 5436233	A	19950725	US 1993-154518	19931119 <--
	JP 06192235	A2	19940712	JP 1993-197039	19930714 <--
	CA 2100626	AA	19940116	CA 1993-2100626	19930715 <--
	AT 208771	E	20011115	AT 1993-305557	19930715
	ES 2167325	T3	20020516	ES 1993-305557	19930715
	PT 579496	T	20020531	PT 1993-305557	19930715
	JP 08099962	A2	19960416	JP 1995-264667	19950920 <--
	JP 2923742	B2	19990726		
PRAI	US 1992-913473	B2	19920715		
	US 1993-76431	B2	19930614		
OS	MARPAT 123:340173				
GI					



AB Title compds. I [R1 is H, Cl-4 alkyl; Y is a single bond or Cl-6 alkylene; A is (i) CyA-(R2)1, (ii) OR0 or S(O)pR0 in which R0 is R0A or R0B; R0A is CyA-(R2)1; R0B is H or Cl-4 alkyl; p is 0-2; CyA is, e.g., (1) 3-7 membered, saturated or unsatd., monocyclic carbocyclic ring, (2) 7-membered, unsatd. or partially saturated, monocyclic hetero ring containing as hetero atoms, one nitrogen atom, one nitrogen and one oxygen atoms, two nitrogen and one oxygen atoms, or one nitrogen and two oxygen atoms, (3) 6-membered, unsatd. or partially saturated, monocyclic hetero ring containing as hetero atoms, one nitrogen and one oxygen atoms, two nitrogen and one oxygen atoms, or one nitrogen and two oxygen atoms; R2 is R2A or R2B; R2A is, e.g., CF3, OCF3; R2B is, e.g., H, Cl-4 alkyl, Cl-4 alkoxy; Z is ZA or ZB, ZA is methylene, ethylene, vinylene, ethynylene; ZB is a single bond; CyB is, e.g., (1) 7-membered, unsatd. or partially saturated, monocyclic hetero ring containing as hetero atoms, one, two or three nitrogen atoms, (2) 6-membered, unsatd. or partially saturated, monocyclic hetero ring containing as hetero atoms, two or three nitrogen atoms, (3) 6-membered, unsatd. or partially saturated,



monocyclic hetero ring containing as a hetero atom, one nitrogen atom; R3 = e.g., H, C1-4 alkyl; R4 = e.g., NHSO2R11, R11 = e.g., C1-4 alkyl; l, m, n are independently 1 or 2 (with provisos)] are provided as inhibitors of cGMP-PDE and TXA2 synthetase. Thus, e.g., treatment of 2-(1-imidazolyl)-4-(2-methoxyethyl)amino-6-(2-triethylsilylethynyl)quinazoline (preparation given) with tetrabutylammonium fluoride afforded 6-ethynyl-4-(2-methoxyethyl)amino-2-(1-imidazolyl)quinazoline (II); II.2HCl demonstrated inhibition of cGMP-PDE with and TXA2 synthetase with IC50 =  $4.6 \times 10^{-8}$  and  $2.4 \times 10^{-6}$  M, resp. Pharmaceutical formulations were given.

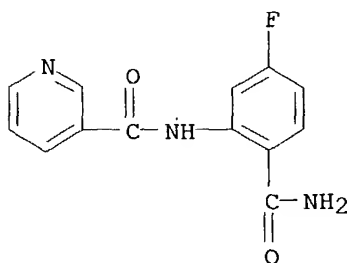
IT 157864-21-6P 157864-28-3P 157864-30-7P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(4-aminoquinazoline derivs. as inhibitors of cyclic guanosine 3',5'-monophosphate phosphodiesterase and thromboxane A2 synthetase)

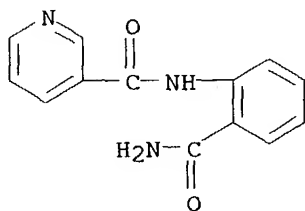
RN 157864-21-6 HCAPLUS

CN 3-Pyridinecarboxamide, N-[2-(aminocarbonyl)-5-fluorophenyl]- (9CI) (CA INDEX NAME)



RN 157864-28-3 HCAPLUS

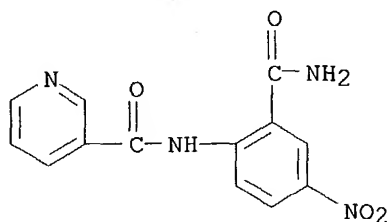
CN 3-Pyridinecarboxamide, N-[2-(aminocarbonyl)phenyl]- (9CI) (CA INDEX NAME)



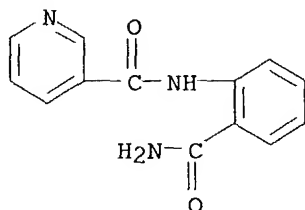
RN 157864-30-7 HCAPLUS

CN 3-Pyridinecarboxamide, N-[2-(aminocarbonyl)-4-nitrophenyl]- (9CI) (CA INDEX NAME)





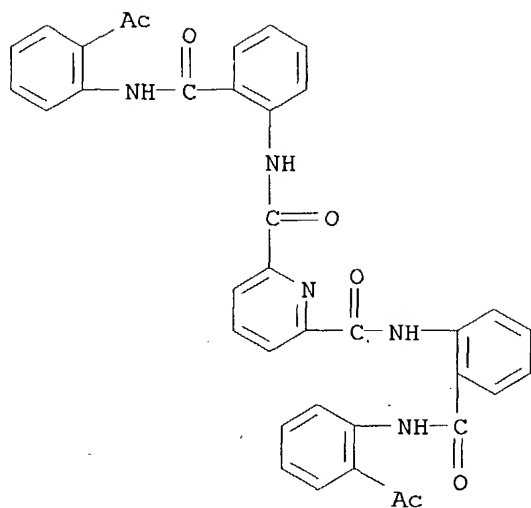
L10 ANSWER 21 OF 33 HCAPLUS COPYRIGHT 2004 ACS on STN  
 AN 1995:746792 HCAPLUS  
 DN 123:132021  
 TI Discovery of Potent Cyclic GMP Phosphodiesterase Inhibitors. 2-Pyridyl- and 2-Imidazolylquinazolines Possessing Cyclic GMP Phosphodiesterase and Thromboxane Synthesis Inhibitory Activities  
 AU Lee, Sung J.; Konishi, Yoshitaka; Yu, Dingwei T.; Miskowski, Tamara A.; Riviello, Christopher M.; Macina, Orest T.; Frierson, Manton R.; Kondo, Kigen; Sugitani, Masafumi; et al.  
 CS Biofor Inc., Waverly, PA, 18471, USA  
 SO Journal of Medicinal Chemistry (1995), 38(18), 3547-57  
 CODEN: JMCMAR; ISSN: 0022-2623  
 PB American Chemical Society  
 DT Journal  
 LA English  
 AB Moderate cyclic GMP phosphodiesterase (cGMP-PDE, PDE V) inhibitor 2-phenyl-4-anilinoquinazoline (I) was identified utilizing MultiCASE assisted drug design (MCADD) technol. Modification of I was conducted at the 2-, 4-, and 6-positions of the quinazoline ring for enhancement of cGMP-PDE inhibitory activity. The 6-substituted 2-(imidazol-1-yl)quinazolines are 1000 times more potent in in vitro PDE V enzyme assay than the well-known inhibitor zaprinast. The 6-substituted derivs. of 2-(3-pyridyl)quinazoline and 2-(imidazol-1-yl)quinazoline exhibited more than 1000-fold selectivity for PDE V over the other four PDE isoenzymes. In addition, 3 cGMP-PDE inhibitors were found to have an addnl. property of thromboxane synthesis inhibitory activity.  
 IT **157864-28-3P**  
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)  
 (pyridyl- and imidazolylquinazolines as cyclic GMP phosphodiesterase and thromboxane synthesis inhibitors)  
 RN 157864-28-3 HCAPLUS  
 CN 3-Pyridinecarboxamide, N-[2-(aminocarbonyl)phenyl]- (9CI) (CA INDEX NAME)





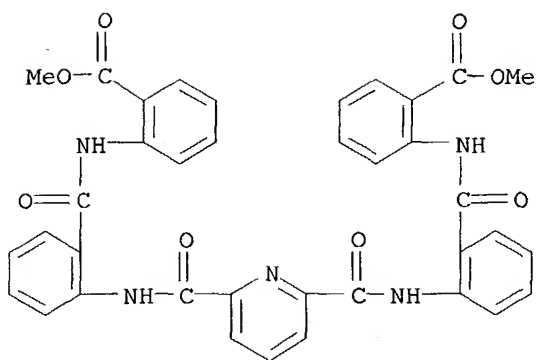
L10 ANSWER 22 OF 33 HCAPLUS COPYRIGHT 2004 ACS on STN  
 AN 1995:714439 HCAPLUS  
 DN 123:216778  
 TI Metallohelices: Effects of Weak Interactions on Helical Morphology  
 AU Kawamoto, Tatsuya; Prakash, Om; Ostrander, Robert; Rheingold, Arnold L.; Borovik, A. S.  
 CS Department of Chemistry, Kansas State University, Manhattan, KS, 66506, USA  
 SO Inorganic Chemistry (1995), 34(17), 4294-5  
 CODEN: INOCAJ; ISSN: 0020-1669  
 PB American Chemical Society  
 DT Journal  
 LA English  
 AB The significant effects of weak interactions on the morphol. of metallohelices are demonstrated in metal complexes of the helical ligand 2,6-bis[[(N'-acetophenoyl)anthranilamide]carboxyamide]pyridine (H2L). This ligand contains 2 aryl arrays that are held rigid through hydrogen bonds and covalently attached to a pyridyl diamidate metal binding chelate. The morphologies helices formed with H2L results from the weak interactions between the appended arrays and the tridentate chelate. H2L has a helical structure in the solid state with the 2 appendage crossing, interacting through  $\pi$ -stacking: (P.hivin.1, a 7.3507(8), b 10.627(1), and c 20.098(3) Å;  $\alpha$  96.64(1),  $\beta$  98.07(1),  $\gamma$  90.26(1)°; V = 1543.6(3) Å<sup>3</sup>, Z = 2, 3598 unique data (Fo  $\geq$  4 $\sigma$ Fo), R(Rw) = 0.0523(0.0656)). NMR and IR studies on the diamagnetic NiL complex show that the helical structure is present in solution. Structural studies by x-ray diffraction methods on the copper(II) derivs. of L2- show the large effects that coordination changes have on helical morphol. Two structural isomers were isolated for CuL: a five coordinate green compound (CuLg) and a four coordinate red complex (CuLr). The five coordinate green complex crystallized from toluene in the space group P.hivin.1 with two independent mols. in the asym. unit cell. The unit cell consts. are a 12.402(3), b 15.382(3), and c 23.267(5) Å,  $\alpha$  107.09(2),  $\beta$  90.68(2),  $\gamma$  104.18(2)°; V = 4096.4(15) Å<sup>3</sup>, and Z = 4. Final residuals for the refinement of 985 parameters against 9210 data were R = 0.0678 and Rw = 0.0681 with a GOF = 1.96. The four coordinate red complex crystallized from toluene in the space group C2/c with unit cell consts. a 24.087(6), b 12.165(3), and c 23.806 Å;  $\beta$  117.450(2)°, and Z = 8. Final residuals for the refinement of 442 parameters against 2662 data R = 0.0411 and Rw = 0.0486 with a GOF = 0.95. The differences in these two structural isomers is even more pronounced in their crystal lattices where micropores dominate the lattice architecture for CuLg and extended helices are present in CuLr.  
 IT **168284-90-0**  
 RL: PRP (Properties); RCT (Reactant); RACT (Reactant or reagent)  
 (crystal structure and complexation with copper and nickel)  
 RN 168284-90-0 HCAPLUS  
 CN 2,6-Pyridinedicarboxamide, N,N'-bis[2-[[[(2-acetylphenyl)amino]carbonyl]phenyl]- (9CI) (CA INDEX NAME)





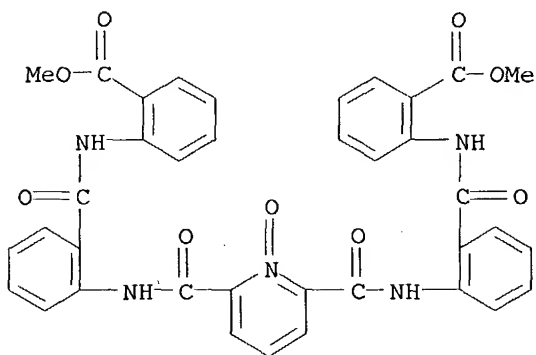
L10 ANSWER 23 OF 33 HCAPLUS COPYRIGHT 2004 ACS on STN  
 AN 1995:71053 HCAPLUS  
 DN 122:105008  
 TI Intra- and intermolecular hydrogen bonding control of supramolecular structure  
 AU Hamilton, Andrew D.; Hamuro, Yoshitomo; Yang, Ji; Geib, Steven J.; Fan, Erkang  
 CS Department Chemistry, University Pittsburgh, Pittsburgh, PA, 15260, USA  
 SO NATO ASI Series, Series C: Mathematical and Physical Sciences (1994), 426 (COMPUTATIONAL APPROACHES IN SUPRAMOLECULAR CHEMISTRY), 101-8  
 CODEN: NSCSDW; ISSN: 0258-2023  
 DT Journal  
 LA English  
 AB Hydrogen bonding is used to control supramol. structure in two distinct ways. The first involves intramol. hydrogen bonds to stabilize linear and helical conformations in synthetic oligomers. The second uses intermol. hydrogen bonding to direct the self-assembly of several interacting subunits.  
 IT 155138-99-1P 155139-01-8P  
 RL: PRP (Properties); SPN (Synthetic preparation); PREP (Preparation) (preparation and crystallog. of)  
 RN 155138-99-1 HCAPLUS  
 CN Benzoic acid, 2,2'-[2,6-pyridinediylbis(carbonylimino-2,1-phenylenecarbonylimino)]bis-, dimethyl ester (9CI) (CA INDEX NAME)





RN 155139-01-8 HCAPLUS

CN Benzoic acid, 2,2'-[(1-oxido-2,6-pyridinediyl)bis(carbonylimino-2,1-phenylenecarbonylimino)]bis-, dimethyl ester (9CI) (CA INDEX NAME)



L10 ANSWER 24 OF 33 HCAPLUS COPYRIGHT 2004 ACS on STN

AN 1994:620104 HCAPLUS

DN 121:220104

TI Transition metal complexes of N-(2-benzamido)pyridine-2'-carboxamide, a potentially tridentate ligand containing one secondary and one primary amide group: preparation and characterization in the solid state

AU Manessi-Zoupa, E.; Perlepes, S. P.; Hondrellis, V.; Tsangaris, J. M.

CS Dep. Chem., Univ. Patras, Patras, Greece

SO Journal of Inorganic Biochemistry (1994), 55(3), 217-33

CODEN: JIBIDJ; ISSN: 0162-0134

DT Journal

LA English

AB The synthesis of N-(2-carbamoylphenyl)pyridine-2-carboxamide (LH2) is reported along with its employment as a ligand.  $[MCl_2(LH_2)_2].DMF$  ( $M = Co, Ni$ ),  $[Cu_2Cl_4(LH_2)_2].DMF$ ,  $[CuCl_2(LH_2)_2]$ ,  $[Co(OH)(LH)]_n.nH_2O$ ,  $[M_2(OH)_2(H_2O)_x(LH)_2]$  ( $M = Ni, Cu$ ;  $x = 4, 2$ ),  $[M(LH)_2].xH_2O$  ( $M = Ni, Cu$ ;  $x = 0, 1$ ),  $[Ni(H_2O)_2(LH)_2].H_2O$ , and  $[CuCl(LH)]_n$  were isolated. The complexes were characterized by elemental analyses, conductivity measurements, x-ray powder patterns, thermal methods, variable-temperature magnetic susceptibilities, and spectroscopic (IR and far-IR, ligand field, ESR) studies. A variety of stereochemistries is assigned for the complexes in



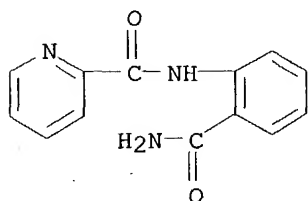
the solid state. The neutral ligand acts as a bidentate chelating agent with ligated atoms being the ring N and the secondary amide O; the LH<sup>-</sup> ion behaves as a bidentate chelating Nring, Nsecondary amide or as a tridentate Nring, Nsecondary amide, Oprimary amide ligand depending mainly on the reaction conditions.

IT 157979-82-3P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)  
(for preparation of transition metal complexes)

RN 157979-82-3 HCAPLUS

CN 2-Pyridinecarboxamide, N-[2-(aminocarbonyl)phenyl]- (9CI) (CA INDEX NAME)



L10 ANSWER 25 OF 33 HCAPLUS COPYRIGHT 2004 ACS on STN

AN 1994:605373 HCAPLUS

DN 121:205373

TI 4-aminoquinazoline derivatives, and their use as medicine

IN Lee, Sung Jai; Konishi, Yoshitaka; Macina, Orest Taras; Kondo, Kigen; Yu, Dingwei Tim

PA Ono Pharmaceutical Co., Ltd., Japan

SO Eur. Pat. Appl., 86 pp.

CODEN: EPXXDW

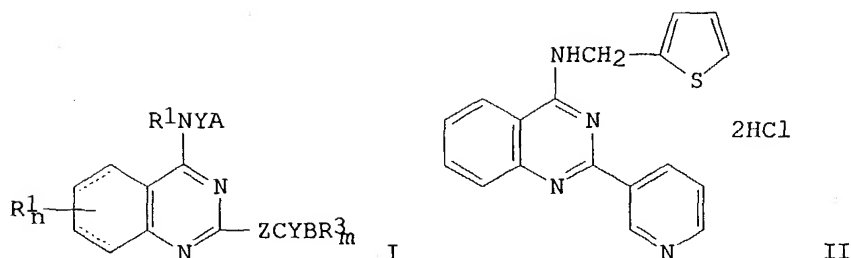
DT Patent

LA English

FAN.CNT 3

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	EP 579496	A1	19940119	EP 1993-305557	19930715 <--
	EP 579496	B1	20011114		
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LI, LU, MC, NL, PT, SE				
	JP 06192235	A2	19940712	JP 1993-197039	19930714 <--
	CA 2100626	AA	19940116	CA 1993-2100626	19930715 <--
	AT 208771	E	20011115	AT 1993-305557	19930715
	ES 2167325	T3	20020516	ES 1993-305557	19930715
	PT 579496	T	20020531	PT 1993-305557	19930715
	JP 08099962	A2	19960416	JP 1995-264667	19950920 <--
	JP 2923742	B2	19990726		
PRAI	US 1992-913473	A	19920715		
	US 1993-76431	A	19930614		
OS	MARPAT 121:205373				
GI					





AB The title compds. I wherein R1 is H or alkyl; Y is bond or alkylene; A is (i) -CyAR2, (ii) -OR0 or -S(O)pR0, R0 = H, alkyl, etc., p is 0-2, (iii) -NR16R17, R16, R17 are H, alkyl; CyA is (1) a 3-7 membered monocyclic carbocyclic ring, (2) a 4-7 membered monocyclic hetero ring containing as hetero atoms, one N atom, one N and one O atoms, two N and one O atoms, or one N and two O atoms, (3) a 4-7 membered monocyclic hetero ring containing as hetero atoms, 1 or 2 O or S atoms, R2 is (1) H, (2) alkyl, (3) alkoxy, (4) -COOR5, in which R5 is H or alkyl, (5) -NR6R7, R6, R7 are H, alkyl, (6) -SO2NR6R7, (7) halogen, (8) CF3, (9) NO2 or (10) CF3O; Z is bond, methylene, ethylene, vinylene or ethynylene; CyB is a heterocyclic ring; R3 is H, alkyl, alkoxy, halogen or CF3; R4 is H, alkyl, alkoxy, etc., and acid addition salts thereof, salts thereof, and hydrates thereof were prepared and have inhibitory effect on cGMP-PDE, or addnl. on TXA2 synthetase. Thus, a representative prepared compound II had inhibitory activity IC50 of  $3.6 \times 10^{-7}$  on cGMP-PDE.

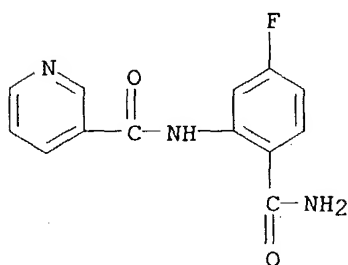
IT 157864-21-6P 157864-28-3P 157864-30-7P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(preparation and reaction of, in preparation of aminoquinazolines as cardiovascular agents)

RN 157864-21-6 HCAPLUS

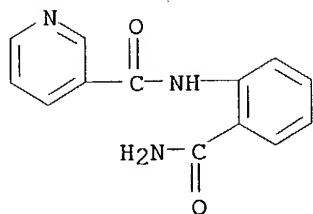
CN 3-Pyridinecarboxamide, N-[2-(aminocarbonyl)-5-fluorophenyl]- (9CI) (CA INDEX NAME)



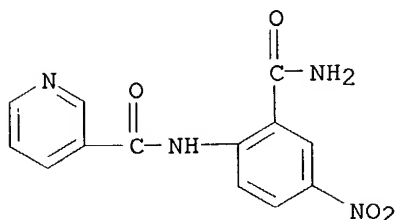
RN 157864-28-3 HCAPLUS

CN 3-Pyridinecarboxamide, N-[2-(aminocarbonyl)phenyl]- (9CI) (CA INDEX NAME)





RN 157864-30-7 HCAPLUS  
 CN 3-Pyridinecarboxamide, N-[2-(aminocarbonyl)-4-nitrophenyl]- (9CI) (CA  
 INDEX NAME)



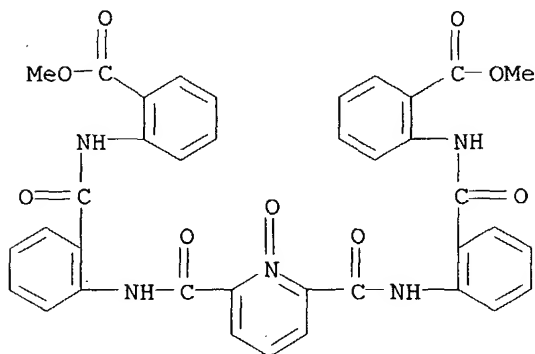
L10 ANSWER 26 OF 33 HCAPLUS COPYRIGHT 2004 ACS on STN  
 AN 1994:323221 HCAPLUS  
 DN 120:323221  
 TI New molecular frameworks: formation of helical secondary structures in a  
 group of oligoanthranilamides  
 AU Hamuro, Yoshitomo; Geib, Steven J.; Hamilton, Andrew D.  
 CS Dep. Chem., Univ. Pittsburgh, Pittsburgh, PA, 15260, USA  
 SO Angewandte Chemie (1994), 106(4), 465-7 (See also Angew. Chem.,  
 Int. Ed. Engl., 1994, 33(4), 446-8)  
 CODEN: ANCEAD; ISSN: 0044-8249  
 DT Journal  
 LA German  
 GI

\* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT \*

AB Helical oligoanthranilamide I (R = CO2Me) was prepared from  
 2,6-pyridinedicarbonyl dichloride and aminobenzamide derivative II (Y = NH2).  
 II (Y = NH2) prepared from 2-nitrobenzoyl chloride condensation with  
 anthranilic acid Me ester to give II, Y = NO2 followed by catalytic  
 hydrogenation. I (R = CO2Me) was characterized by proton NMR and x-ray  
 crystallog. and the nature of its helical structure discussed. Helical  
 oligoanthranilamide III was also characterized by x-ray crystallog.  
 IT 155139-01-8P  
 RL: SPN (Synthetic preparation); PREP (Preparation)  
 (preparation and crystal and mol. structure and proton NMR of,  
 conformational anal. in relation to)  
 RN 155139-01-8 HCAPLUS



CN Benzoic acid, 2,2'-[(1-oxido-2,6-pyridinediyl)bis(carbonylimino-2,1-phenylenecarbonylimino)]bis-, dimethyl ester (9CI) (CA INDEX NAME)

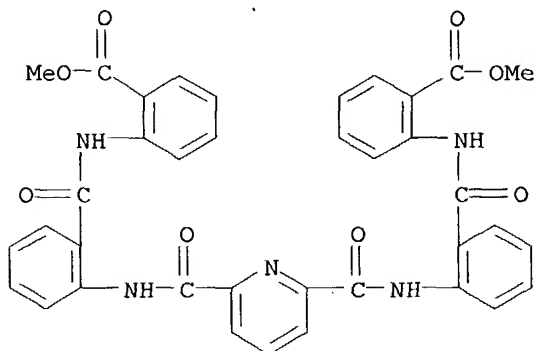


IT 155138-99-1P

RL: PRP (Properties); SPN (Synthetic preparation); PREP (Preparation)  
(preparation and crystal and mol. structure of)

RN 155138-99-1 HCAPLUS

CN Benzoic acid, 2,2'-[2,6-pyridinediylbis(carbonylimino-2,1-phenylenecarbonylimino)]bis-, dimethyl ester (9CI) (CA INDEX NAME)



L10 ANSWER 27 OF 33 HCAPLUS COPYRIGHT 2004 ACS on STN

AN 1994:270304 HCAPLUS

DN 120:270304

TI 4-Hydroxy-2-quinolones. 18. Synthesis and antithyroid activity of  
1-R-2-oxo-3-(4-oxo-3H-quinazolin-2-yl)-4-hydroxyquinolines

AU Ukrainets, I. V.; Taran, S. G.; Bezugly, P. A.; Kovalenko, S. N.; Turov,  
A. V.; Marusenko, N. N.

CS Ukr. Farm. Akad., Kharkov, 310002, Ukraine

SO Khimiya Geterotsiklicheskih Soedinenii (1993), (9), 1223-6

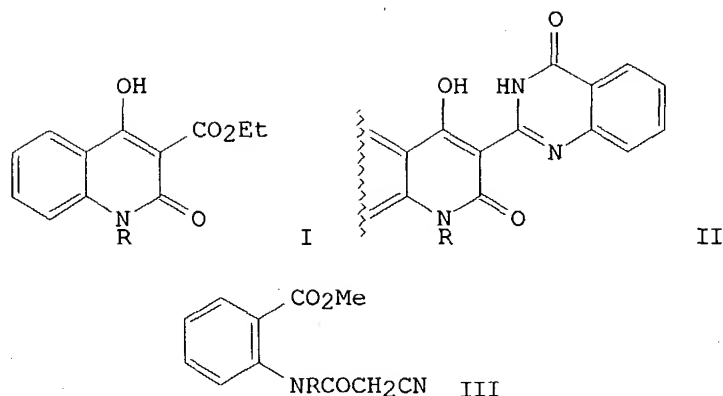
CODEN: KGSSAQ; ISSN: 0132-6244

DT Journal

LA Russian

GI





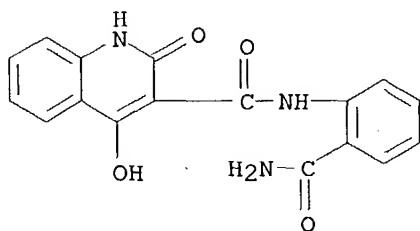
AB Treating quinolinecarboxylates I (R = H, Me, Et, R1 = OEt) with anthranilamide gave 96-98% intermediate amides I (R1 = o-H2NCOC6H4NH) which underwent base catalyzed cyclization to give 95-96% quinazoline derivs. II. The latter could also be obtained starting from Et anthranilate derivative III. All compds. reduced the level of thyroxine with II (R = H) showing the greater decrease.

IT 154325-54-9P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)  
(preparation and intramol. cyclocondensation of, in preparation of hydroxyoxoquinolylquinazolinone)

RN 154325-54-9 HCAPLUS

CN 3-Quinolinecarboxamide, N-[2-(aminocarbonyl)phenyl]-1,2-dihydro-4-hydroxy-2-oxo- (9CI) (CA INDEX NAME)



L10 ANSWER 28 OF 33 HCAPLUS COPYRIGHT 2004 ACS on STN

AN 1982:162351 HCAPLUS

DN 96:162351

TI Anthranilic acid derivatives

PA Kyoto Pharmaceutical Industries, Ltd., Japan

SO Jpn. Kokai Tokkyo Koho, 4 pp.

CODEN: JKXXAF

DT Patent

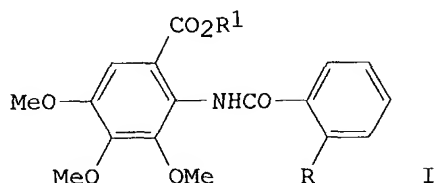
LA Japanese

FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI JP 56161362	A2	19811211	JP 1980-43744	19800403 <--
PRAI JP 1980-43744		19800403		



OS CASREACT 96:162351  
GI



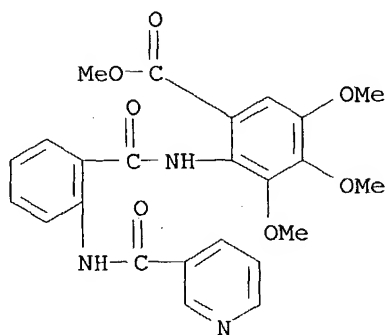
AB Four anthranilic acid derivs. I (R = NO<sub>2</sub>, NH<sub>2</sub>, nicotinamido; R<sub>1</sub> = Me, H), having smooth muscle-relaxing or contracting activity (no data), were prepared from Me 2-amino-3,4,5-trimethoxybenzoate (II). Thus, 2.45 g II acylated with 1.9 g 2-nitrobenzoyl chloride in CHCl<sub>3</sub> gave 82% I (R = NO<sub>2</sub>, R<sub>1</sub> = Me), which was reduced over Pd-C to give I (R = NH<sub>2</sub>, R<sub>1</sub> = Me). Acylation with nicotinoyl chloride gave I (R = nicotinamido, R<sub>1</sub> = Me) (III), which was hydrolyzed with 0.5 N NaOH at 40-50° to give I (R = nicotinamido, R<sub>1</sub> = H). III was also prepared by cultivating *Aspergillus terreus afficanus* IFO 8835.

IT 81469-77-4P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)  
(preparation and hydrolysis of)

RN 81469-77-4 HCAPLUS

CN Benzoic acid, 3,4,5-trimethoxy-2-[[2-[(3-pyridinylcarbonyl)amino]benzoyl]amino]-, methyl ester (9CI) (CA INDEX NAME)



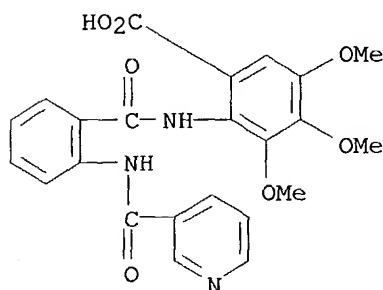
IT 81469-76-3P

RL: SPN (Synthetic preparation); PREP (Preparation)  
(preparation of)

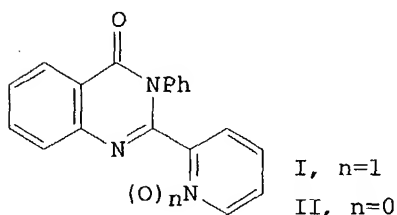
RN 81469-76-3 HCAPLUS

CN Benzoic acid, 3,4,5-trimethoxy-2-[[2-[(3-pyridinylcarbonyl)amino]benzoyl]amino]- (9CI) (CA INDEX NAME)





L10 ANSWER 29 OF 33 HCAPLUS COPYRIGHT 2004 ACS on STN  
 AN 1980:586283 HCAPLUS  
 DN 93:186283  
 TI Some reactions of 2-heterocycle-4(3H)-quinazolinones with electrophilic reagents  
 AU Muraoka, Keiji; Ichikawa, Masataka; Hisano, Takuzo  
 CS Fac. Pharm. Sci., Kumamoto Univ., Japan  
 SO Yakugaku Zasshi (1980), 100(4), 375-85  
 CODEN: YKKZAJ; ISSN: 0031-6903  
 DT Journal  
 LA Japanese  
 OS CASREACT 93:186283  
 GI



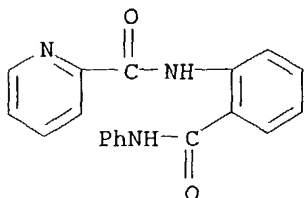
AB 2-(1-Oxido-2-pyridino)-3-phenyl-4(3H)-quinazolinone (I), 2-(1-oxido-2-pyridinio)-3-phenyl-4(3H)-quinazolinone 1-oxide, and the control compound, 3-phenyl-2-(2-pyridyl)-4(3H)-quinazolinone (II) were nitrated under appropriate conditions to give 3-(3-nitrophenyl)-2-(1-oxido-2-pyridinio)-4(3H)-quinazolinone, 3-(3-nitrophenyl)-2-(1-oxido-2-pyridinio)-4(3H)-quinazolinone 1-oxide, and 3-(3-nitrophenyl)-2-(2-pyridyl)-4(3H)-quinazolinone or the dinitro derivative 6-nitro-3-(3-nitrophenyl)-2-(2-pyridyl)-4(3H)-quinazolinone selectively and in comparatively higher yield. II was halogenated with N-bromosuccinimide or N-chlorosuccinimide by varying reaction temperature and concentration of H<sub>2</sub>SO<sub>4</sub>, and by adding silver sulfate as an activator, to give 3-(3-bromophenyl)-2-(2-pyridyl)-4(3H)-quinazolinone and 6-bromo-3-phenyl-2-(2-pyridyl)-4(3H)-quinazolinone or the dihalides 3-(3,4-dibromophenyl)-2-(2-pyridyl)-4(3H)-quinazolinone or 6-bromo-3-(3-bromophenyl)-2-(2-pyridyl)-4(3H)-quinazolinone, and a further derivative which was presumably a trihalide.  
 IT 75359-17-0 75359-18-1  
 RL: RCT (Reactant); RACT (Reactant or reagent)



(cyclization of)

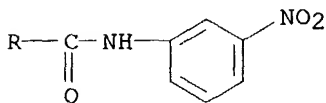
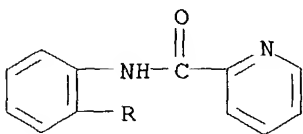
RN 75359-17-0 HCAPLUS

CN 2-Pyridinecarboxamide, N-[2-[(phenylamino)carbonyl]phenyl]- (9CI) (CA INDEX NAME)



RN 75359-18-1 HCAPLUS

CN 2-Pyridinecarboxamide, N-[2-[[[(3-nitrophenyl)amino]carbonyl]phenyl]]- (9CI) (CA INDEX NAME)



L10 ANSWER 30 OF 33 HCAPLUS COPYRIGHT 2004 ACS on STN

AN 1973:546545 HCAPLUS

DN 79:146545

TI 2-Pyridyl-4(3H)-quinazolinones

IN Hisano, Takuzo; Ichikawa, Masataka; Ide, Hiroyuki; Noda, Kanji; Nakagawa, Akira; Motomura, Toshiharu

PA Hisamitsu Pharmaceutical Co., Inc.

SO Jpn. Kokai Tokkyo Koho, 7 pp.

CODEN: JKXXAF

DT Patent

LA Japanese

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 48062779	A2	19730901	JP 1971-98092	19711203 <--
	JP 54034749	B4	19791029		
PRAI	JP 1971-98092		19711203		

GI For diagram(s), see printed CA Issue.

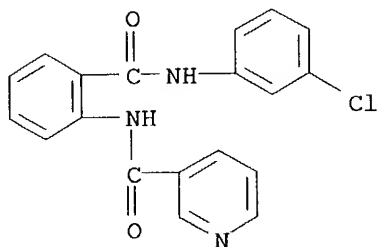
AB Quinazolinones (I) were prepared by cyclizing, e.g., 2-nicotinamido-3'-chlorobenzanilide (II). Thus, heating II 18 hr at 200° gave I (R = m-Cl, pyridyl 3-substituted). Similarly, 18 addnl. I were prepared

IT 39122-37-7

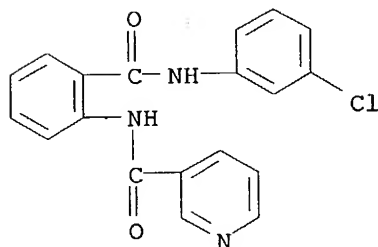
RL: RCT (Reactant); RACT (Reactant or reagent)  
(cyclization of, pyridylquinazolinone from)



RN 39122-37-7 HCAPLUS  
 CN 3-Pyridinecarboxamide, N-[2-[[ (3-chlorophenyl) amino] carbonyl] phenyl]-  
 (9CI) (CA INDEX NAME)



L10 ANSWER 31 OF 33 HCAPLUS COPYRIGHT 2004 ACS on STN  
 AN 1973:58340 HCAPLUS  
 DN 78:58340  
 TI Syntheses and pharmacological activities of 2-heterocyclic substituted  
 4(3H)-quinazolinone derivatives  
 AU Hisano, Takuzo; Ichikawa, Masataka; Kito, Go; Nishi, Tomoyuki  
 CS Fac. Pharm. Sci., Kumamoto Univ., Kumamoto, Japan  
 SO Chemical & Pharmaceutical Bulletin (1972), 20(12), 2575-84  
 CODEN: CPBTAL; ISSN: 0009-2363  
 DT Journal  
 LA English  
 AB The preparation of a series of 2-pyridyl-4(3H)-quinazolinones is described.  
 Studies on the structure-activity relationship demonstrated that  
 2-pyridyl, 3-pyridyl, and 4-pyridyl substitution at 2 position of  
 quinazolinone ring, and o-, m-, and p-substitution of the aromatic ring at  
 3 position are suitable for manifestation of hypnotic activity. The order  
 of potency of activities produced by the difference in the position of  
 substitution of substituents at 2 and 3 position decreased in the order of  
 4-pyridyl, o-tolyl > 3-pyridyl, o-tolyl > 2-pyridyl, o-tolyl. The  
 anthranilates of these 4(3H)-quinazolinones were inactive. A maximum  
 hypnotic effect accompanied with other potent pharmacol. properties was  
 observed in 2-(4-pyridyl)-3-o-tolyl-4(3H)-quinazolinone, the potency of  
 which was equal to or stronger than Methaqualone in mice.  
 IT **39122-37-7P**  
 RL: SPN (Synthetic preparation); PREP (Preparation)  
 (preparation of)  
 RN 39122-37-7 HCAPLUS  
 CN 3-Pyridinecarboxamide, N-[2-[[ (3-chlorophenyl) amino] carbonyl] phenyl]-  
 (9CI) (CA INDEX NAME)





L10 ANSWER 32 OF 33 HCAPLUS COPYRIGHT 2004 ACS on STN

AN 1966:403958 HCAPLUS

DN 65:3958

OREF 65:699h,700a-f

TI Syntheses and reactions of imidazoles

AU Almirante, L.; Mugnaini, A.; Fritz, L. Polo; Provinciali, E.

CS Lab. Bioterapio Milanese Selvi, Milan

SO Bollettino Chimico Farmaceutico (1966), 105(1), 32-44

CODEN: BCFAAI; ISSN: 0006-6648

DT Journal

LA Italian

OS CASREACT 65:3958

AB 2-Aminopyridine (I) (425 g.), and 450 g. BrCH<sub>2</sub>CH(OMe)<sub>2</sub> (II) in 500 ml. toluene refluxed 16 hrs. gave 1-(2,2-di-methoxyethyl)-2-aminopyridinium bromide, which was made basic in 400 ml. H<sub>2</sub>O to yield 322 g. 1-(2,2-dimethoxyethyl)-2-imino-1,2-dihydropyridine (III), b<sub>1</sub> 108°; HCl salt m. 184-5° (EtOH). Similarly was prepared the 4-methyl derivative of III, b<sub>2</sub> 137°; picrate m. 147-8° (EtOH). III b<sub>2</sub> 123-6°, was also obtained from 19 g. I, 33.8 g. II, and 20.16 NaHCO<sub>3</sub> by boiling 25 hrs. in 40 ml. PhMe. By this method were prepared the 6-methyl derivative of III, b<sub>1</sub> 120°, 2-imino-1-(2,2-dimethoxyethyl)pyrimidine, b<sub>2</sub> 123° [picrate m. 135-6° (EtOH)], and 1-(2,2-dimethoxyethyl)-2-imino-1,2-dihydrothiazole, b<sub>2</sub> 112°; HCl salt m. 156-7° (iso-PrOH). III (322 g.) was added slowly to 1750 ml. H<sub>2</sub>SO<sub>4</sub> at 0° and the solution kept 5 hrs. at 90° to give 203 g. imidazo[1,2-a]pyridine (IV), b<sub>0.5</sub> 97° [n]<sub>D</sub> 20D 1.6211; picrate m. 216-17° (EtOH). Similarly, 5-methylimidazo[1,2-a]pyridine, b<sub>1.5</sub> 109° [picrate m. 232-3° (EtOH)], 7-methylimidazo[1,2-a]pyridine b<sub>0.7</sub> 113° [picrate m. 223-4° (EtOH)], imidazo[1,2-a]pyrimidine, m. 131-3° (C<sub>6</sub>H<sub>6</sub>), and imidazo[1,2-b]thiazole, b<sub>2</sub> 106° [picrate m. 205-6° (EtOH)], were prepared II (11.2 g.) in 11 ml. H<sub>2</sub>O containing 2.5 ml. 48% HBr

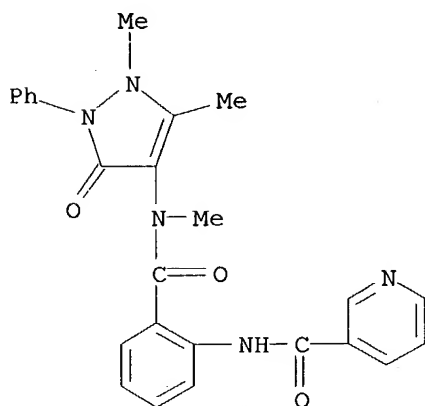
was

shaken 2 hrs., poured into 150 ml. H<sub>2</sub>O, treated with 25 g. NaHCO<sub>3</sub> and 8 g. 5-bromo-2-aminopyridine, and shaken 7 hrs. at 20° to give 76% 6-bromoimidazo[1,2-a]pyridine, b<sub>1.5</sub> 165°, m. 53-5°; perchlorate, m. 236-8° (EtOH). Similarly, 6-chloroimidazo[1,2-a]pyridine, b<sub>1.5</sub> 132° [perchlorate m. 223-4° (EtOH)] was prepared 2-Aminopyrimidine (19 g.), and 13.7 g. BrCH<sub>2</sub>OMe suspended in 80 ml. EtOH was heated 3 hrs. at 60° to give 29% 2-methylimidazo[1,2-a]pyrimidine hydrobromide, m. 254-5°. Similarly, 2-methylimidazo[1,2-a]pyridine b<sub>2</sub> 105° [HCl salt, 195-6° (EtOH)], and 2,5-dimethylimidazo[1,2-a]pyridine b<sub>0.5</sub> 112° [perchlorate 215-16° (EtOH)] were obtained. IV (5.9 g.) and 2.25 g. Me<sub>2</sub>NH in AcOH was mixed with 1.5 g. HCHO and 25 ml. AcOH, and heated 3 hrs. at 60° to give 6.7 g. hygroscopic 3-(dimethylaminomethyl)imidazo[1,2-a]pyridine, m. 80-1° (ligroine); methiodide m. 233-4° (EtOH). Similarly, 2-methyl-2-(dimethylaminomethyl)imidazo[1,2-a]pyridine-2HCl, m. 250-1° (EtOH-Et<sub>2</sub>O) [methiodide m. 200-1° (decomposition) (EtOH)], 2-methyl-3-(diethylaminomethyl)imidazo[1,2-a]pyridine-2HCl.H<sub>2</sub>O, m. 203° (decomposition) (EtOH-Et<sub>2</sub>O), 2-methyl-3-(morpholinomethyl)imidazo[1,2-a]pyridine, m. 93-5° (ligroine), 2-methyl-3-[4(β-hydroxyethyl)-piperazin-1-ylmethyl]imidazo[1,2-a]pyridine, m. 167-9° (C<sub>6</sub>H<sub>6</sub>C<sub>6</sub>H<sub>12</sub>), 2-methyl-3-[bis-(2-hydroxyethyl)aminomethyl]imidazo[1,2-a]pyridine, m. 114-16°



(C<sub>6</sub>H<sub>6</sub>), 7-methyl-3-(dimethylaminomethyl)imidazo[1,2- $\alpha$ ]pyridine-2HCl, 250-2° (C<sub>6</sub>H<sub>6</sub>) [methiodide m. 232-3° (decomposition) (EtOH)], and 2-(p-chlorophenyl)-3-(di-methylaminomethyl)imidazo[1,2- $\alpha$ ]pyridine-2HCl, m. 222-4° (EtOH-Et<sub>2</sub>O), [methiodide m. 220-22° (decomposition) (EtOH)], were prepared IV (11.8 g.) in 20 ml. Me<sub>2</sub>NCHO was treated with 46.5 g. POCl<sub>3</sub> in 60 ml. Me<sub>2</sub>NCHO with shaking at 0° and then heated 7 hrs. at 75° to give 31% 3-formylimidazo[1,2- $\alpha$ ]pyridine, m. 127-9°; HCl salt 242.5-4.5° (EtOH). The formyl derivative (66 g.), 39.5 g. H<sub>2</sub>NOH.HCl, and 65 g. HCO<sub>2</sub>Na in 500 ml. HCO<sub>2</sub>H was refluxed 3 hrs. with stirring to give 62 g. 3-carbamoylimidazo[1,2- $\alpha$ ]pyridine, m. 252-5° (iso-PrOH); HCl salt m. 298-9°; perchlorate m. 257.5-9.5°. The carbamoyl derivative (62 g.) was suspended in 500 ml. POCl<sub>3</sub> and refluxed 15 hrs. with stirring until clear to give 49.7 g. 3-cyanoimidazo[1,2- $\alpha$ ]pyridine, m. 156.5-7.5° (iso-PrOH). This derivative (1.4 g.) in 30 ml. EtOH containing 4.3 g. 85% KOH in 8.6 g. H<sub>2</sub>O was refluxed 12 hrs. under N to yield 0.9 g. 3-carboxyimidazo[1,2- $\alpha$ ]pyridine, m. 244-5° (decomposition) (H<sub>2</sub>O).

IT **6188-07-4**, Nicotinanilide, 2'-(antipyrinylmethylcarbamoyl)-  
(preparation of)  
RN 6188-07-4 HCAPLUS  
CN Nicotinanilide, 2'-(antipyrinylmethylcarbamoyl)- (7CI, 8CI) (CA INDEX NAME)

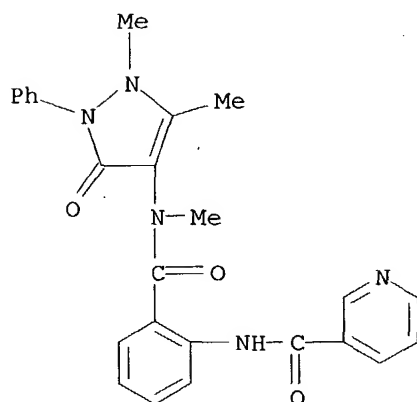


L10 ANSWER 33 OF 33 HCAPLUS COPYRIGHT 2004 ACS on STN  
AN 1966:403957 HCAPLUS  
DN 65:3957  
OREF 65:699f-h  
TI New acyl derivatives of 4-aminoantipyrine  
AU Dory, Istvan; Puklics, Maria  
CS Chinoin Gyogyszer Vegyeszeti Termekgyara, Budapest, Hung.  
SO Magyar Kemiai Folyoirat (1966), 72(4), 174-6  
CODEN: MGKFA3; ISSN: 0025-0155  
DT Journal  
LA Hungarian  
AB 4-Aminoantipyrine (I) and its Me- and PhCH<sub>2</sub> derivs. were condensed with N-nicotinoyl o- and p-aminobenzoic acid, and, N-nicotinoylanthranilic acid (II), yielding compds. which have pain relieving properties, similar in activity to allopurinol and amidazophene, but of lesser toxicity. Thus the



Na salt of the nicotinoyl derivative in C<sub>6</sub>H<sub>6</sub> or CH<sub>2</sub>Cl<sub>2</sub> was treated with SOCl<sub>2</sub> to yield the corresponding acyl halide, which without further separation, was condensed with I or its derivs. Compds. prepared include 4-[p-(nicotinoylamino)benzoyl]aminoantipyrine (III), 55.4%; the p-(nicotinoylamino)benzoyl; p-methylamino analog 93.3%; the 4-N-Me derivative of III, the 4-N-benzyl derivative of III, 34.7%; and 4-N-methyl-4-N-nicotinoylanthranilylaminoantipyrine. Condensation of I with II yielded, owing to ring closure, 2-( $\beta$ -pyridyl)-3-(4-antipyrinyl)-4-quinazolone, instead of the expected condensation compound

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(preparation of)  
RN 6188-07-4 HCAPLUS  
CN Nicotinanilide, 2'-(antipyrinylmethylcarbamoyl)- (7CI, 8CI) (CA INDEX NAME)



=> log y

COST IN U.S. DOLLARS

SINCE FILE	TOTAL
ENTRY	SESSION
166.52	480.55

FULL ESTIMATED COST

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)

SINCE FILE	TOTAL
ENTRY	SESSION
-23.10	-23.10

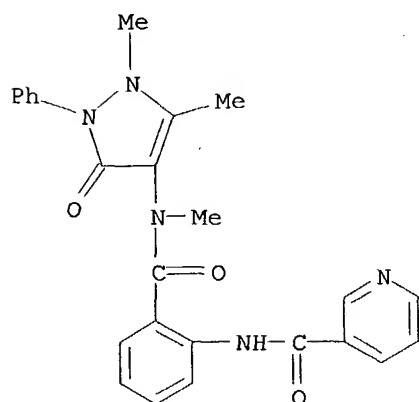
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Na salt of the nicotinoyl derivative in C<sub>6</sub>H<sub>6</sub> or CH<sub>2</sub>Cl<sub>2</sub> was treated with SOCl<sub>2</sub> to yield the corresponding acyl halide, which without further separation, was condensed with I or its derivs. Compds. prepared include 4-[p-(nicotinoylamino)benzoyl]aminoantipyrine (III), 55.4%; the p-(nicotinoylamino)benzoyl; p-methylamino analog 93.3%; the 4-N-Me derivative of III, the 4-N-benzyl derivative of III, 34.7%; and 4-N-methyl-4-N-nicotinoylanthranylaminoantipyrine. Condensation of I with II yielded, owing to ring closure, 2-( $\beta$ -pyridyl)-3-(4-antipyrinyl)-4-quinazolone, instead of the expected condensation compound

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RN 6188-07-4 HCAPLUS  
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